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ECOGEN CASE STUDIES SERIES

Shifting Boundaries: Gender, Migration and  
Community Resources in the Foothills  
of Choluteca, Honduras

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# Abstract

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This analysis of the "shifting boundaries" of a rural livelihood system focuses on the foothills of Choluteca in Southern Honduras. It explores both migration and the management of local resources in the context of existing patterns of gender and socioeconomic inequities. This case study examines how the rural men and women in the steep foothills of Choluteca, the uplands, manage their natural and social environments in a setting of environmental degradation, limited access to and ownership of productive land, limited wage earning opportunities and increasing levels of poverty. Evidence from this study suggests that the women and men in this region face growing uncertainties and declining, long-term household security as they struggle to carve a livelihood out of the steep hillsides.

In particular, the study examines 1) the balance men and women strive to reach between the opportunities and the constraints presented by the expanding commercialization of the agricultural sector and 2) the ways in which women and men manage the limited resources available to their household and community.

Seasonal and permanent migration in search of wage labor are common responses to the increased population pressures and the declining land, water and forest resources in the upland communities. Gendered roles, expectations and patterns of migration clearly shape not only the livelihood choices for individuals and their households but the very social fabric of these communities. Families, especially women and children, must often make difficult adjustments for labor lost to on-farm production. Increases in male outmigration, for example, have created many female-managed households in all four communities. Amid social, economic and physical change, women and men are renegotiating gender relations at the household level to cope with crises and uncertainties.

Environmental degradation, poverty and outmigration have challenged households to adapt their natural resource management strategies. Women, in particular, attempt to manage their natural resource base and broaden economic opportunities by strengthening the variety of tree and plant species available in their *solares* and the immediate vicinity of their homes.

Community organizations involving both men's and women's groups have gradually developed over the past 20 years in an attempt to find group solutions to community-wide problems and to gain greater collective access to natural and financial resources. Despite the positive impact of some development organizations in the uplands of Choluteca the levels of local participation in group activities, initiated from outside the community, have remained relatively low. Women's priorities, in particular, are usually addressed as "add-ons" to projects and women and men are seldom incorporated into leadership or management roles.

The insights gained from an analysis of shifting boundaries and livelihood strategies in Southern Honduras can help development policy makers and practitioners build more effective and equitable policies, programs and projects across local, regional and national levels.

# I. Gender Roles, Natural Resources and Poverty in Southern Honduras

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Honduras has entered the last decade of the twentieth century with a long history of economic inequities and environmental degradation. Both private and public interests continue to exploit the country's natural resources in order to supply the world market with agricultural products and raw materials, and to service Honduras' unwieldy foreign debt (Kaimowitz 1990; Paus 1988; and Stonich 1989). The widespread commercialization of the nation's agricultural sector presents multiple constraints as well as short-term opportunities for the men and women who derive their sustenance primarily within the rural landscape. For the most part, the small farmers and the landless or near-landless poor remain peripheral to most governmental and corporate planning. This process has contributed to the marginalization of the rural men and women working the hillsides of Southern Honduras.

Much of the recent scholarship emerging from growing concerns with sustainable development, social inequities and natural resource depletion cast light on the specific conditions found in Southern Honduras. The interdisciplinary political ecology approach has adapted an analytical framework to explain the socioeconomic impacts and root causes of environmental degradation (Blaikie and Brookfield 1987; Coekburn and Hecht 1989; Schmink and Wood 1987; Thrupp 1993; and Stonich 1992). Susan Stonich's extensive work on Southern Honduras establishes the linkages between the regional political economy, ecological deterioration and the demographic changes which are reshaping the lives of its rural population. Many other scholars have expanded these analyses to focus also on the complex connections between growing poverty, natural resource depletion and the continued economic, social and political marginalization along the lines of gender and class (Agarwal 1991; Beneria and Sen 1986; Leonard 1989; Shiva 1989; Thomas-Slayter and Rocheleau 1994; Tinker 1990).

Inequities generated by the expansion of large-scale export-oriented agriculture appear to have disadvantaged the upland communities of Southern Honduras.<sup>1</sup> Limited access to productive land, mounting levels of land degradation and deforestation, rapid population growth and severe unemployment are among the myriad of economic, social and environmental problems facing rural men, women and children in Southern Honduras in the 1990's. In the struggle to secure their livelihoods, they must make difficult decisions about their allocation of roles and responsibilities within an increasingly complex livelihood system.

The scarcity of natural and financial resources directly influences the socioeconomic status and health of households and individuals, as well as the division of labor, responsibilities and rights based on gender within households. The men and women of the uplands, however, do not live in isolation from the larger political economy. The range of opportunities and constraints affecting the women and men of the uplands are linked

*The range of opportunities and constraints affecting the women and men of the uplands are linked to the broad export agricultural economy, which dominates the fertile lowlands and valleys, and to the natural resource depletion in the entire region and throughout Honduras as a whole.*

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The problems facing the rural populations of the uplands of Southern Honduras are, therefore, two-tiered. First, people must manage their households and resources within a restricted space on the fragile, low-producing slopes, on the margins of the fertile lowlands that are controlled by the landed elite (ECOGEN Field Data 1992; Stonich 1991a, 1991b, 1991c; Boyer 1982). Second, within the upland communities, access to and control over local natural resources and income-generating opportunities are further limited along lines of gender, socioeconomic status and age (ECOGEN Field Data 1992). The first tier characterizes the inequitable relationship between these communities and the regional political economy. The second tier, more specifically linked to the daily livelihood strategies of individuals and households inside these communities, is the primary focus of this case study. The study also explores the interactions between these two tiers, whether through government agencies, nongovernmental organizations or local involvement in wage labor outside the community.

## **Key Questions**

We use one central question as the starting point for this case study: How do the rural women and men manage their natural and social environments in a context of environmental degradation, inequitable access to and ownership of land, limited wage earning opportunities and increasing levels of poverty? From this broad question, we frame a specific research agenda to examine the nature of the problems in the upland communities and the coping strategies implemented by the men and women who live there. We explore:

- the extent to which natural resource degradation has disadvantaged women and men within and across poor upland households;
- the strategies men and women use to manage both external and internal economic and environmental pressures generated by the regional political economy and the conditions of the local natural resource base;
- the ways in which these pressures and coping strategies affect: 1) gender relations within households and communities and 2) the socioeconomic status of the household.

To address these topics, this case study focuses on one rural region in the uplands of Southern Honduras--Linaca in the Department of Choluteca. It explores the balance men and women struggle to reach between the opportunities and the constraints presented by the expanding monetarized economy. It also investigates the ways in which men and women manage the limited resources available to their households and communities. The study links multiple levels of analysis: from the region of Southern Honduras to communities within Linaca to gender-based intra-household relations. As a result, the study identifies many of the variables which are reshaping the rural uplands of Choluteca and the lives of the men, women and children who live there.

## **Research Methods**

The case study is based on the field research conducted between April and July, 1992 by a five member team including the authors and three Honduran researchers. The team coordinated its activities with a national counterpart, the Land Use and Productivity Enhancement (LUPE) Project, which began its work in



Linaca in November, 1991.<sup>2</sup> The focal point of the research was located within the area of influence of LUPE's Linaca Extension Agency, one of its rural agencies in the Department of Choluteca (see Figure 1).

The research team, in coordination with LUPE, selected this region primarily because of the important connection between the current environmental crisis in Southern Honduras and ECOGEN's mandate to explore local efforts to manage natural resources in such contexts around the world. This region was also selected because of its remote location relative to the capital and other large cities, which has resulted in limited access to both governmental and nongovernmental services and assistance. In addition, the staff of the Linaca Agency had recently completed a diagnostic study to identify the social, economic and environmental characteristics in the Linaca region, and were very enthusiastic about the opportunity to both deepen and share their knowledge of the communities in which they worked.

This study concentrates on four Linaca communities, selected by population size and geographic location. Each community is comprised of over 50 households. Accessible by rocky, dirt roads, the communities are at varying distances from each other and the city of Choluteca. They represent three "agroecological" zones, as defined by agricultural production systems and altitude.

Throughout the study, the research team committed itself to using participatory data gathering methods. The team drew on the work of Chambers *et al.* (1989), Cernea (1985) and Korten (1984), and used data-gathering tools derived from participatory rural appraisal (NES 1990) and gender analysis (e.g., Feldstein and Poats 1989; Thomas-Slayter *et al.* 1993). Central to the research efforts were local peoples' knowledge, community participation, and dialogue. In all cases, the team "returned the data" to the members of the communities (see Appendix A).

## **The Uplands\* of Choluteca**

The department of Choluteca in Southern Honduras borders the Pacific between Nicaragua and El Salvador. El Zapote, La Picota, Agua Caliente de Linaca and Cerro Verde, the four communities included in this study, are located in Linaca, one of the rural regions in the northern uplands of the municipality of Choluteca (see Figure 1).

These communities have many characteristics typical of other rural areas in Honduras' southern uplands. Once enjoying the levels of moisture corresponding with the subtropical humid forest of the lower Choluteca River watershed, they now cultivate largely deforested semiarid lands. Traditional agricultural practices of swidden and intercropping of basic grains prevail, while the accompanying system of shifting cultivation involves shorter and shorter fallow periods due to land shortages (Thompson 1992; Stonich 1991b). The distinct dry and rainy seasons of the region are unpredictable and drought conditions are increasingly common (Stonich 1989).

During the dry months, November to April or May, unemployment reaches levels as high as 60 percent. While most families depend upon the off-farm income earned outside the community during this time period, a number of men and women remain within the communities producing petty commodities or selling small

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\*Approximately 60 percent of Southern Honduras is covered by steep foothills and mountains, comprising the region's "uplands." Although these mountains rarely reach altitudes of more than 1600 meters, they are rugged and form many isolated valleys (Stonich 1992).

animals. Variations in access to local natural resources such as water and forests, distances from Choluteca, physical infrastructure and access to government services all affect the changing livelihood systems of the women and men who live there.

Its predominantly mountainous landscape limits the amount of land suitable for cultivation throughout Honduras. Of Honduras' total area of 112,008 square kilometers, 75 percent has slopes of 25 percent or greater (SECPLAN *et al.* 1990). The 1988 census estimates a 3.6 percent annual population growth rate since 1974 (Dirección General de Estadísticas y Censos 1988). The rural population grew by 48 percent from 1974 to 1988. An estimated 61 percent of Honduras' total population still live in rural areas (World Bank 1990; SECPLAN 1988).

Since the mid-1950s, national and international development efforts in Southern Honduras have consistently promoted and nurtured the expansion of non-traditional exports, including cotton, sugar, cattle and, more recently, melon. As a result, the consolidation of land into large landholdings in the lowlands has pushed many *campesinos* onto marginal lands or into low wage labor (Stonich 1992). The uneven distribution of the quickly expanding population and land ownership patterns explains the move of small farmers and their families onto the fragile hillsides. Population densities by municipality in the department of Choluteca, ranging from 22 people/km<sup>2</sup> in the lowlands to 160 people/km<sup>2</sup> in the uplands (1988 estimates in Stonich 1991a), reflect the high concentration of people on the hillsides and a movement towards less labor-intensive agricultural practices in the lowlands.

The commercial agricultural sector has concentrated its activities on the fertile lowlands, but small-scale cattle ranching has increasingly penetrated the upland forests since the 1930s (Dewalt 1985). While cattle raising has provided short-term economic gains for some medium and small producers in the foothills and highlands, the transformation of forests, agricultural lands, and even home compounds into pastures and corrals has contributed to a decline in soil fertility, the quality and quantity of the water supply, and access to valuable trees, animals and plant resources (ECOGEN Field Data 1992; Stonich 1991a).

Evidence from this study suggests that the men and women in this region of Southern Honduras face growing uncertainties, formidable obstacles and declining long-term household security as they struggle to carve a livelihood out of the steep hillsides. Current population and resources distribution in Choluteca and the other regions of Southern Honduras, is producing "a class of semi-proletarianized households without access to sufficient land and off-farm employment" (Stonich 1992). Most of these households must produce food crops for their families as well as seek a variety of short and long-term wage earning opportunities outside of their communities to maintain subsistence levels.

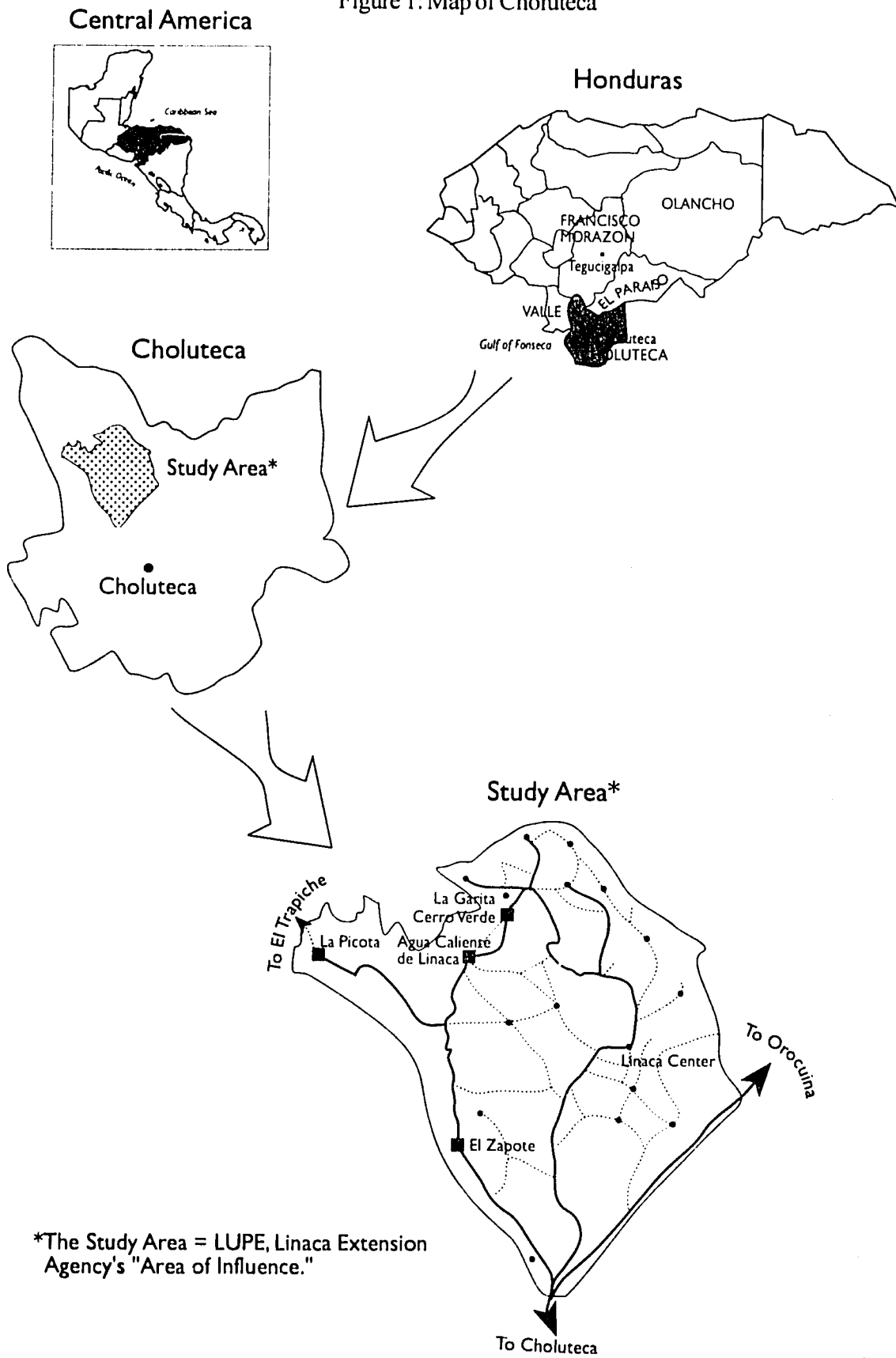
***Gendered roles, expectations and patterns of migration clearly shape not only the livelihood choices for individuals and their households but the very social fabric of these communities.***

Women's burdens are further compounded by the gender-based inequities that persist at all levels of Honduran society. Gendered roles, expectations and patterns of migration clearly shape not only the livelihood choices for individuals and their households but the very social fabric of these communities.

Migration in search of wage labor plays a key role in upland livelihood strategies. In fact, many demographic studies identify Southern Honduras as one of the primary *zonas*

***Evidence from this study suggests that the men and women in this region of Southern Honduras face growing uncertainties, formidable obstacles and declining long-term household security as they struggle to carve a livelihood out of the steep hillsides.***

Figure 1: Map of Choluteca



\*The Study Area = LUPE, Linaca Extension Agency's "Area of Influence."

*expulsoras*, zones of origin of the migrants, because of its relatively high population densities, degraded land and limited access to government services (SECPLAN *et al.* 1990; CELADE 1986; CELADE 1988). Like many rural people throughout Honduras, the men and women from the uplands comprise the swelling rural to urban migration stream which has contributed to the rapid growth of urban centers: between 1974 and 1988 the urban population in Honduras grew by 101% (SECPLAN 1988). Rural to rural migration also provides many upland household members with seasonal income from the export agricultural sector.

Slowly, the socially and economically-defined boundaries in Southern Honduras are shifting: between rural and urban economies, between households and the community and between men and women as they renegotiate gender roles. In some cases, these changes are a cause for optimism as people seek opportunities in these difficult surroundings. This case study explores Linaca's "shifting boundaries" -- both those that are promising and those that are distressing -- for the insights they offer into changing livelihood systems and gender relations in the uplands of Southern Honduras.

## II. The Community Profiles: Natural and Social Resources in Linaca

---

When travelling northwest from the city of Choluteca, one can see cattle pastures stretched out on both sides of the rocky dirt roads. The transition from the lowland pastures to the foothills of the region begins in El Zapote, located 13 kilometers northwest of the city of Choluteca. Steep hills in the western part of the community divide lower and upper Zapote geographically as well as socioeconomically. Agua Caliente de Linaca, the largest and oldest community in the region, is nine kilometers northwest of El Zapote and its town center is at an altitude of 303 meters. Homes and farm plots, however, now extend to altitudes as high as 550 meters up the western and northern hillsides. Another 2.3 kilometers further to the north, Cerro Verde stands at 798 meters. The steep, narrow road leading up to this community is passable only in the dry season by four-wheel drive vehicles. La Picota is not as high as Cerro Verde, but it is more isolated in the rugged western hills, and even further from Choluteca (see Table 1 and Figure 1.)

Table 1: Community Profiles

	<b>Altitude (meters)</b>	<b>Number of Households</b>	<b>Number of Inhabitants</b>	<b>Kms from Choluteca/ Travel time* (min)</b>
<b>El Zapote</b>	231	71	336	13(20)
<b>Agua Caliente</b>	303	179	909	22(45)
<b>La Picota</b>	600	91	556	30(76)
<b>Cerro Verde</b>	798	63	380	24.3(65)

(ECOGEN Field Data, 1992)

\* Travel time calculated by 4-wheel drive vehicle.

Agua Caliente has been connected to Choluteca by a road since 1965, whereas El Zapote was linked by road in 1976, and Cerro Verde in 1982. A bus arrives in Agua Caliente from Choluteca once a day and several pick-up trucks transport supplies and people regularly. Pick-ups also come daily to El Zapote in the summer months, primarily to transport day workers to the melon plantations. Some men in Agua Caliente and El Zapote have bicycles. Otherwise, the primary modes of transportation in the communities are donkeys, hitchhiking or walking. Unreliable transportation intensifies the relative isolation of La Picota and Cerro Verde.

Regular linkages to the city of Choluteca are vital for access to markets and broader educational opportunities. The only markets available in the communities are small general stores called *pulperias*, which sell foodstuffs and household products from outside the community. Supplies are extremely limited, but certain

basic items are almost always available: rice, beans, coffee, bananas, sugar, oil, sodas, soap, sweets, beer and basic medications. Residents must travel to Choluteca for most other necessities. The men and women who produce goods within the communities, such as bread, tortillas, clay water vessels, and building materials, face difficult access to markets because of poor transportation. During certain seasons, middlemen occasionally come to the communities to purchase fruits, eggs, chicken and pigs to sell in the city of Choluteca.

## **Social Infrastructure**

The center of each community contains a primary school (grades 1-6), a Roman Catholic chapel, and a soccer field (see Figure 2). Several of the local and regional organizations use the primary school, the church and the homes of community leaders as meeting places. The communities do not have separate halls for social events. Agua Caliente, is a rural center for several of the neighboring communities due to its two health centers, a Mormon church and a *granero* which houses a motorized corn grinder. The community's *patronato* (the all-male Council for Community Development) has recently chosen a site and gathered materials with municipal monies to build its first community center (see Chapter VI).

## **Community Organizations**

Since the mid-1970s community organizations throughout Linaca have expanded and become more interconnected. The growth of community groups can be linked to 1) increased governmental and nongovernmental involvement in the region and 2) a weakening of traditional family support groups due to increasing migration rates. The core organizations in each community center around the Roman Catholic Church, the Ministries of Health and Education, and the Municipality, which supports the efforts of the local *patronatos* to improve community infrastructure. Many women emphasize the importance of the Catholic Church's Housewives' and Youth Clubs as avenues for women's "legitimate" participation outside of the home and school. Many of these women's groups managed the first community feeding centers (*lactarios*) and school lunch committees. Their involvement in church activities paved the way for other women to participate in community development and natural resource management organizations introduced in the mid to late 1980s (see Chapter VI).

## **Education**

Forty-one percent of those surveyed in the four communities cannot read or write, a figure corresponding with national illiteracy rates. Only 25 percent had completed more than the third grade. Illiteracy, however, is directly related to age. Over 60 percent of the respondents under age 50 could read and write, whereas only 36.4 percent of those 51 and older could. Among the younger respondents, men and women had comparable rates of literacy. Today, parents emphasize the importance of education, at least at the primary level, for both girls and boys. In addition, older students and adults have the opportunity to complete their schooling through the Catholic church's expanding adult education program, *Escuela Radiofonica*, which now reaches three of the four communities.

High absenteeism in the primary schools of Linaca leads to low completion rates. (Fourteen percent completed six years.) From April through July, the hungry months, many children suffer low energy and may stay at home. Children also provide labor at home during harvests or at other critical times in the agricultural calendar, because of family illness or parental migration. Girls' absenteeism rates are three times greater than boys' (ECOGEN Field Data 1992). Consequently, over 60 percent of primary school graduates are male.

## Health

Of the four communities, only Agua Caliente has health care centers. The residents of Cerro Verde use these centers and have access to mobile vaccination services. La Picota's residents have access to a public health center in neighboring El Trapiche (see Figure 1). Most families from El Zapote find the hospital in Choluteca closest, although crowds and long waits discourage trips for anything other than emergencies.

Other health care services include health promoters, who make periodic visits to rural communities, midwives and a few traditional *curanderos*, who provide community-based health care. Some medicinal plants can be found in people's yards and in the brush between hamlets, but many of the less common herbs utilized by community healers are scarce due to deforestation and active promotion of modern medicines by health care providers.

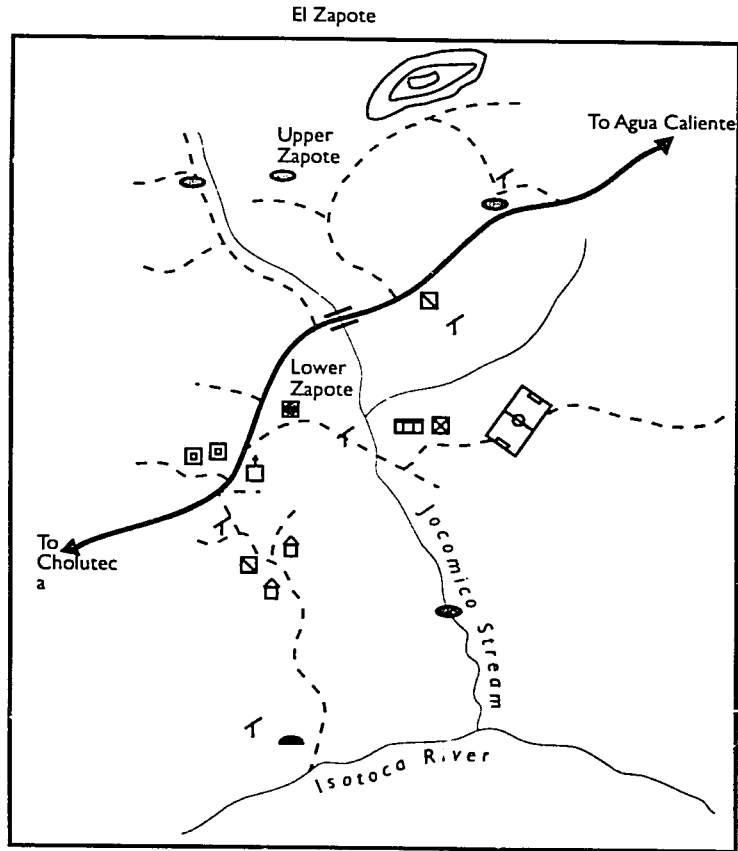
The most common ailments reported at the public health center in Agua Caliente are intestinal parasites from poor water quality and respiratory infections from dust and poor hygiene. Besides facilities located on school property and at the health centers, there are few latrines in the communities. In addition, most animals wander freely both inside and outside of the homes, further increasing the potential for disease, especially in small children.

## Natural Resources

Acute scarcity and resource shortages characterize the state of the natural environment in the four Linaca communities. Linaca's women, men and children must travel further or work longer hours year-round than they did even twenty years ago in order to procure their daily subsistence (ECOGEN field interviews 1992). Inadequate protection of the region's watershed and extensive deforestation have drastically depleted resources. Moreover, access to arable lands within or surrounding the communities is declining.

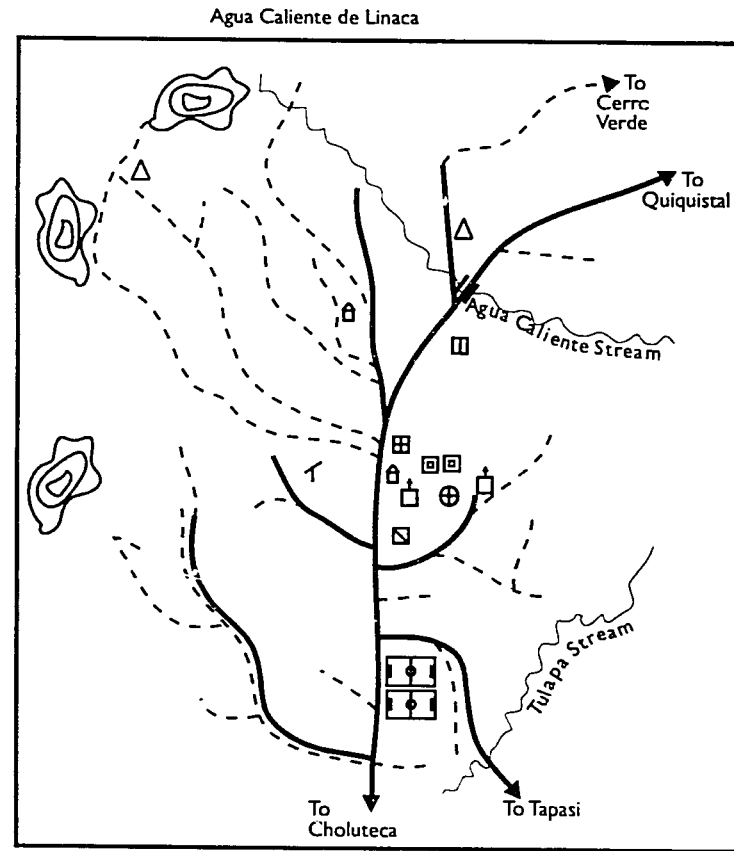
## Land

In all of the communities, parcels of land pass from generation to generation, gradually carving the landscape into ever smaller pieces. Internal population growth, coupled with the arrival of both displaced farmers and cattle from the lowlands, increase the demand for cleared land. Figure 3 represents the extent to which La Picota's hillsides have been transformed from forest cover to large agricultural plots and pastures. This sketch also illustrates that a few families maintain control over the majority of the land in La Picota. Therefore, unlike the other three communities, plots of land are partitioned by poor and landless renters, not by inheritance. In 1992, community members reported a range of land ownership or rental between 0 and 12 *manzanas* (1 *manzana* = .7 hectare or 1.73 acres). There are families with larger tracts of land, but exact information regarding holding size was not available at the time of conducting the interviews.<sup>3</sup> Over half of the population in each community has access to between 0.1 and 2 *manzanas* of land (less than three acres.) Approximately 20 percent of the households in all four communities are landless.



- |  |  |  |                            |
|--|--|--|----------------------------|
|  | "Natural Well"                               |  | Production of Tiles/Bricks |
|  | Lavenders<br>(concrete washboards and sinks) |  | Water Pump                 |
|  | Soccer Field                                 |  | Church                     |
|  | Schools                                      |  | Water Tank                 |

Source: Field Data, 1992



- |  |                        |  |                                   |
|--|------------------------|--|-----------------------------------|
|  | Motorised Corn Grinder |  | River/Stream                      |
|  | Wells                  |  | Footpath                          |
|  | Public Health Center   |  | Road                              |
|  | Pulperias              |  | Semi-Private Health Clinic        |
|  | Feeding Center         |  | Production of Small Clay Utensils |

Figure 2: Sketch Maps of Agua Caliente and El Zapote



Table 2: Concentration of Land Holdings\* in all Communities Among Surveyed Households

Percentage of Households	Size of Holding Measured in	
	Manzanas	Acres
20	0	0
62	< 2	< 3.5
11	2 - 5	3.5 - 8.5
7	> 5	> 8.5

\* Land either owned or being utilized in the 1992 calendar year

N=96

People measure the land's value by size, distance from the house, degree of slope, and soil fertility. Farmers in all four communities travel anywhere from 20 meters to two kilometers to reach their agricultural plots. The extra time and effort expended in transportation of produce and materials burdens the entire household. Therefore, the location of the *parcela* is an indicator of the socioeconomic status of the household.

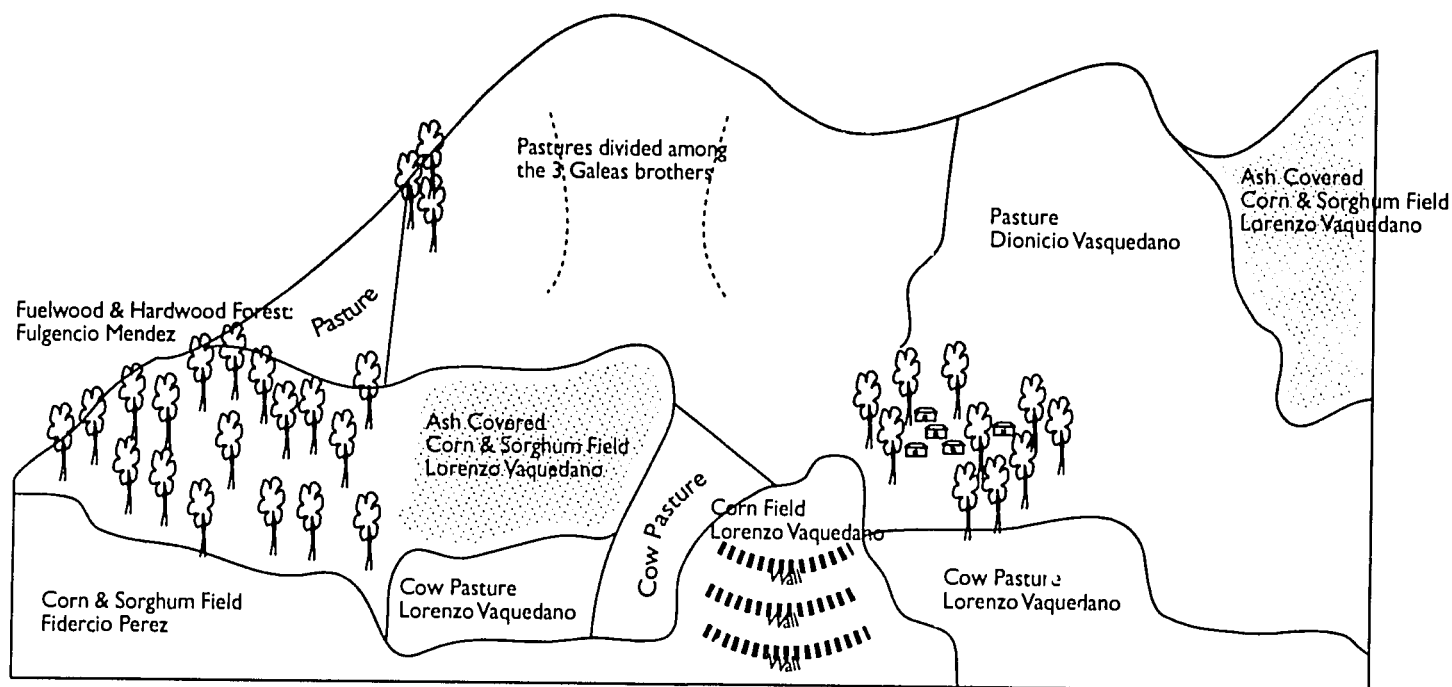
Historically, inheritance has been the primary means by which both men and women acquire land. At the time of the surveys, 40.6 percent of farmers in the communities owned their land. Of these, 87 percent inherited the land and 12.3 percent purchased it. Men own 74 percent of the agricultural plots; women own only 14 percent of the land and two percent is jointly owned by husband and wife (see Figure 4). Although purchases are infrequent, some permanent migrants or medium and large landholders have sold plots of land to neighbors in the community. Many young men and women borrow small plots of land from their parents or other relatives until they are able to purchase, rent or inherit a plot. Sharecroppers work their parents' or neighbors' parcels in exchange for a third or a half of the harvest.

Land shortages reduce the security once provided by inheritance, especially for women who have little chance of obtaining any portion of their parents' property. In 1992, an average of 18.3 percent of Linaca men and only 2.2 percent of Linaca women anticipated inheriting some land. When asked how they would eventually distribute their land, 61 percent of all respondents replied that they either did not have enough land to give to their children or that they would sell it and try to give their children a monetary inheritance.

## Water

Stone dry riverbeds, yellow-brown vegetation and recently burned fields were the prominent features in the Linaca region in April and May of 1992. While the scene was not unusual for the end of the dry season, Linaca was experiencing a drought. Several farmers risked planting corn and sorghum despite the lingering dry season, only to lose their first crops. Others waited for the storm clouds. There was overwhelming

Figure 3: Land Use Patterns on a Mountainside in La Picota



consensus among men and women that water scarcity is their most threatening problem today. Droughts and water shortages hit the region as early as the late 1950s, but the total desiccation of rivers and streams and the sinking of the water table are newer phenomena.

Even when the rainy season provides sufficient water, its quality is questionable. Runoff from erosion and animal waste into open wells forces some women to travel more than two kilometers to fetch clean water. Systems of water pipes and pumps have not guaranteed access to potable water. In Cerro Verde, for example, the USAID-funded water system stopped functioning three years after installation. The frequent mechanical failure of pumps forces women and children to seek those open wells and streams which still contain water. Access to and ownership of a water source within or adjacent to household property contributes directly to the socioeconomic status of all its members.

## Agriculture

Swidden agricultural practices, along with hand cultivation, typify subsistence farming communities in much of rural Honduras, including Linaca. The primary crops are corn, sorghum and red beans. Other traditional crops include *ayote*, *yuca*, and *camote* and various garden vegetables. Recently, governmental and nongovernmental agricultural extension agents have encouraged the diversification of both traditional and non-traditional crops to include, for example, watermelon and sesame. Yet, more than half of the people in the communities still plant only two crops as primary crops. Because of land shortages, a decrease in fallow land and a subsequent decline in production and soil fertility, few farmers harvest enough food for their families. Besides sesame and watermelon, none of the crops planted in the region are specifically defined as cash crops. While the surplus of subsistence crops may be sold, very few households are able to market corn, sorghum or beans.

*“When my parents were children,” said a 29 year old woman, “there were fewer people and more land, and now, you can’t let the land rest; it is exhausted. We have to plant more land to get similar harvests.”*

Domestic animals are a vital security net for rural families, especially for those with limited access to suitable agricultural plots. Most raise small livestock, especially pigs and chickens, for both consumption and sale. About 25 percent own cows or horses. Large animals are usually sold only in crisis situations. One woman in El Zapote explained how her family sold all but one of their ten cows, which comprised the family’s savings, in order to buy a new plot of land. Overall, land shortages and a decline in productivity has resulted in the sale of animals to meet immediate needs at the expense of long-term household security.

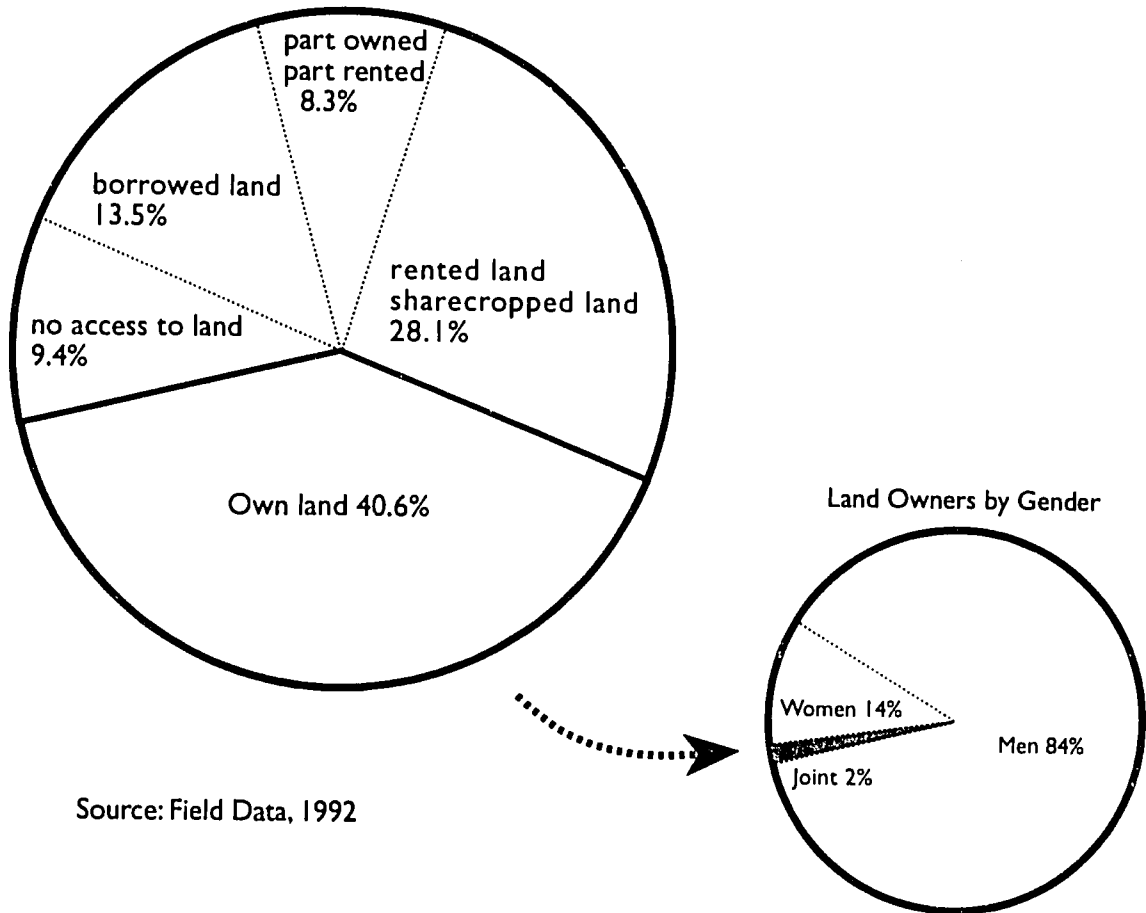
## Forests

Linaca households face an increasing scarcity of timber and non-timber forest resources. New settlements, pastures, and agricultural plots impinge upon the once-forested areas between communities and on the steep slopes, thereby exposing the land to erosion and the watershed to evaporation.

The receding forest disrupts the livelihood systems in these communities at multiple levels. Most profound is the decreasing access to fuelwood and hardwood for construction. Many households now collect most of their wood from trees on their own plots of land. Men and women without trees on their land, or without any land whatsoever, must travel much greater distances to reach the remaining common forest spaces. The shrinking forest also reduces the population of animals such as rabbits, deer, wild turkey and lizards which previously added valuable protein to the family diet, especially during food shortages. Because of their constricted habitat and the scarcity of wild prey, predators such as coyotes, foxes and wild cats now descend into the communities to hunt domestic animals. This situation has further depleted the animal stock of many upland farmers (ECOGEN field research 1992).

The primary indicators of wealth in rural Choluteca are 1) access to and ownership of fertile, productive land, 2) the number and types of domestic animals owned by household members, and 3) income from permanent employment. Because access and ownership of household resources also vary by the gender and age of an individual, not all members of a household will necessarily experience the same socioeconomic status as the senior, male members. Other significant determinants of greater socioeconomic status include the location of a water source, diverse tree species and other natural resources within a household’s property. Many women also emphasize the importance of the ownership of household items such as beds, fuel-saving

Figure 4: Land Tenure Patterns in Linaca



Source: Field Data, 1992

stoves, storage facilities, latrines, separate shelters for chickens and pigs, as well as a productive garden with a variety of vegetable crops. Several men identified new types of status symbols which have emerged within the communities. These include: building stone walls to prevent erosion, hiring wage laborers, and “not needing their wives to work in the cornfields.”

For Linaca’s residents, subsistence pressures wax and wane throughout the year. During the hardest months, before the rains begin and before the first harvest, men, women and children are compelled to reconfigure traditional roles and responsibilities. In an effort to secure adequate food supply, health care, fuel and other household needs, individuals cross over community boundaries in search of other income possibilities. They are forming linkages with the formal agricultural sector and urban economy in attempts to alleviate their marginal position in Honduras’ rural subsistence economy.

### III. Gender and Local Migration Patterns

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The men, women and children of the Linaca region confront the deterioration of the natural environment, mounting land pressures, and limited community-based income generation opportunities with a range of responses and strategies. Many opt to migrate in pursuit of wage labor, on either a temporary or permanent basis. Outmigration has become the main vehicle through which the individual, the household and the community are integrated into the broader regional and national economy. Although this assimilation into the market economy has not been uniform across households and communities, most rural households in Linaca depend on some outside wage earnings.

#### **Why Men and Women Migrate**

The majority of the migrants from Linaca come from two distinct class groupings. First, the landless and land poor, most dependent on wage earnings, seek employment in agriculture, domestic work and semi-skilled manual labor. The men and women who continue to cultivate small quantities of subsistence crops on plots of rented or owned land tend to migrate for three to four months during the dry season when labor requirements on the farm ease up. Those who rely almost entirely on wages earned from migration work outside the community for longer stretches of time. However, these semi-skilled workers often can only find seasonal work. The second group of migrants are members of more privileged households, with higher levels of education. These individuals cannot find suitable job opportunities in their own communities. They often prefer to hire agricultural laborers to work their fields or to rent portions of their land to neighbors while they work elsewhere.

Individuals in the Linaca region rarely make decisions about migration isolated from the household and community context.<sup>4</sup> Many studies of household economic behavior assert that household members tend to coordinate their activities and, through a group decision-making process, continually rework strategies based on shifting opportunities (Crummett 1987; Schmink 1984; Stonich 1991b; Wood 1982). Not all household members, however, have equal voice in this process. Position in the household hierarchy based on gender and age often determines an individual's say in choices about migration. If parents or other household members decide that the family needs children's wage earnings, daughters are more likely to participate in long-term migration at an early age because they have little access to paid work at the community level. Moreover, as young teenagers, girls can earn an adult wage as domestic servants.

Young sons, on the other hand, begin working with their fathers or brothers in the community, on their own farm or as wage laborers on neighboring farms. At around the age of 16, they begin to migrate with male relatives for a few months each year to work primarily in commercial agriculture or construction. In communities where adequate wage labor is available for young men, male outmigration is less prevalent. Only 38 percent of the men and boys in Linaca, however, could find wage work on other peoples' farms within their own communities during 1991 and 1992. The majority of these workers were hired on a seasonal basis for very low wages during the months of heaviest agricultural work. This work conflicted with the labor requirements of their own households for the production of basic grains on their own or rented land.

Women, especially the unmarried, abandoned or widowed, have even more difficulty generating income without migrating. Women are not hired as agriculturalists in the Linaca communities and the de-

mand for their home-made products is being replaced with cheaply manufactured goods available in the *pulperias*.

## Who Migrates

In 63.5 percent of the households surveyed in Linaca, at least one household member and up to as many as five worked outside of the community either seasonally or permanently in 1991 or 1992. Overall, there were 97 male and 30 female migrants in the 96 households surveyed in 1992. Sixty percent of the male and 30 percent of the female migrants participate in the rural to rural migratory stream.

Seventy percent of female migrants work in urban areas and 57 percent of those women are between the ages of 14 and 23. All of these women are engaged in "domestic" and service professions. Very few migrate to harvest export agricultural crops, although some reported joining other family members to harvest melons and coffee. Women's ability to migrate to the commercial agricultural sector is often dependent on the number and age of children they have, the availability of resident female extended family members to provide child care and their marital status. The women who did report migrating to work in agriculture (20 percent) had no young children and either accompanied their husbands or did not have resident husbands or male companions.

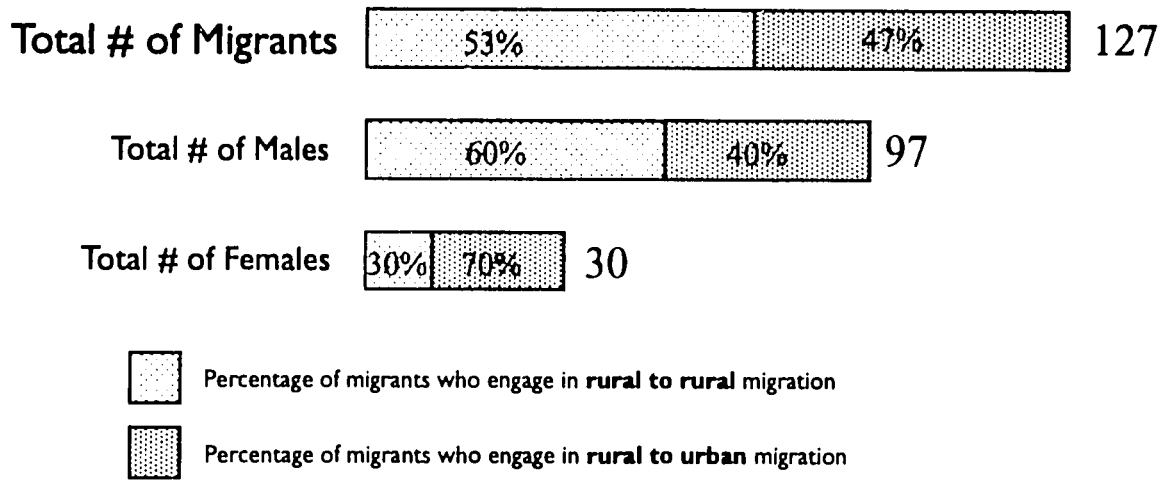
Established gender roles, deeply embedded in the sociocultural ideology,<sup>5</sup> also affect women's ability to migrate. In the upland communities of Choluteca, traditional social norms of female behavior continue to place greater limitations on women's mobility and integration into the market economy than in many other rural regions of Honduras. Most men and women in these communities still identify women's primary responsibilities as caring for children, small livestock and the household. There have been gradual generational changes in gender-based restrictions; young daughters migrate with greater frequency than their mothers did, and more remain in the cities to establish their own households, often as single mothers. Overall, however, community choices in Linaca consistently favor keeping the woman close to the home compound, where she performs her traditional household duties in addition to those of family members who have migrated. This situation severely affects poor and landless women who face an increasing struggle to meet basic subsistence requirements.

## Female-headed Households

The trends of both permanent and temporary male outmigration have led to an increase in *de facto* female-headed households in Linaca. In the four communities of Linaca, 25 percent of the households are women-headed, based on factors of abandonment and widowhood.<sup>6</sup>

Labor migration and the acceptance of high levels of male infidelity further aggravate the increasing rate of abandonment throughout rural Honduras (Howard 1989). The frequency of "free union" relationships, estimated as high as 50 percent in some rural regions of Honduras, tend to increase the vulnerability of women and children. Several young Linaca women insisted that there were short-term advantages to free unions, especially financial. "Rather than spending our money on the wedding," explained a young girl in El Zapote, "we were able to purchase a bed and the necessary utensils for cooking and fetching water." Young girls who wish to escape from a burdensome situation in their parents' household are often willing to "run away with" or "be stolen by" a boyfriend, often forfeiting rights to a church wedding. In the long-run, however, free unions tend to benefit the men more than the women, since men have fewer legal obligations

Table 3: Male and Female Migrants from Linaca



Source: Field Data, 1992

to their female companions and children if they decide to leave. Some studies suggest, however, that regardless of civil status, poor women and their children are unprotected from sudden abandonment (Howard 1989; Corvalan 1990; SNV 1990).

Male and female “spouses” reside together (either married or in free union) in 75 percent of the households interviewed in Linaca. In 17 percent of these households, however, the man worked outside of the community between five to twelve months each year and returned home ranging anywhere from once every 15 days to five months. Most of these men do not relinquish their control over household finances and often bring home purchased goods rather than money for their spouses and children. The women and children are completely responsible for the daily subsistence requirements and the maintenance of the home and farm in the absence of the men. Although these women do not define themselves as heads-of-household, they do assume that role in the men’s absence.

More men work for wages both within and outside the Linaca communities than women. Because of their monetary input, male family members are credited with much higher contributions to the household economy. Financial contributions are not limited, however, to the male head-of-household. Several members of the rural family add their wages to the household economy (see Table 4). In 45 percent of the Linaca households, women are active participants in the pooling of financial resources to meet family needs.

Table 4: Contributors of Wage Earnings to Surveyed Households

Contributor	Percentage of Households*
man	81 percent
woman	45
male children	27
female children	11
male parent	7
female parent	5
male sibling	2
female sibling	1

\*Percentages do not equal 100 percent because there may be multiple wage earners per household.

Total number of households surveyed = 96.

## Destinations of Migrants

### The Rural Sector

The newest and most accessible source of temporary employment for the Linaca communities lies in melon production. There are five melon plantations/packing plants in Southern Honduras owned by investors from the United States, Israel and Honduras. Sur-Agro, a US-Honduran owned company, which employs many workers from Linaca, began its cultivation of melons in 1984. Sur-Agro cultivates between 1000 and 1400 *manzanas* in the lowlands near the city of Choluteca. The company rents a small percentage of this land to nearby *campesino* groups who are beneficiaries of the agrarian land reform. The groups must cultivate 75 percent of that land with melons and sell them to the company. These melons in turn are sold to intermediaries who transport the fruit to the US, El Salvador and Nicaragua. The "less perfect" melons remain in the Honduran national market.

The majority of the employment opportunities on the melon plantations occur between December and March. Managers of Sur-Agro prefer to hire women to rotate and cut the fruits because, according to the company's public relations director, "they are more responsible, aren't alcoholics, save their money and are more often perfectionists" (personal interview, June, 1992). He stated that collecting and transporting the fruit is "the work of the men." Despite the demand for women on melon plantations, only a small number of women migrants from the Linaca communities (13 percent) seek this work, suggesting that demand for labor does not necessarily outweigh the socially defined roles for women and women's work which prevail in the upland communities. Although exact figures are unavailable, the supervisory staff at Sur-Agro and several female employees interviewed on site insist that women from the surrounding communities seek plantation work with much greater frequency because they are able to return to their homes daily and fulfill many of their own household responsibilities.

The sugar cane plantations and sugar refineries, which have operated since the early 1970s in Choluteca,



also continue to employ temporary wage laborers from the Linaca region. Large numbers of men are hired each year from January to April to harvest and process the sugar cane. Most of the men who migrate from the uplands cut the cane on the plantation or work with the machinery in the refinery. The women employees who are all from the surrounding lowland communities, clean offices and perform secretarial duties.

The coffee plantations of El Paraíso are the major providers of seasonal employment for migrants from La Picota and Agua Caliente. The distances between the coffee zones and Linaca, however, require that the migrant reside outside of the community for the entire season. As a result, only six percent of all female migrants pick coffee. A very small number of men from Linaca migrate to other parts of the commercial agricultural sector to work as herdsmen in the cattle ranches of Olancho or in salt production near the mangroves along the Gulf of Fonseca.

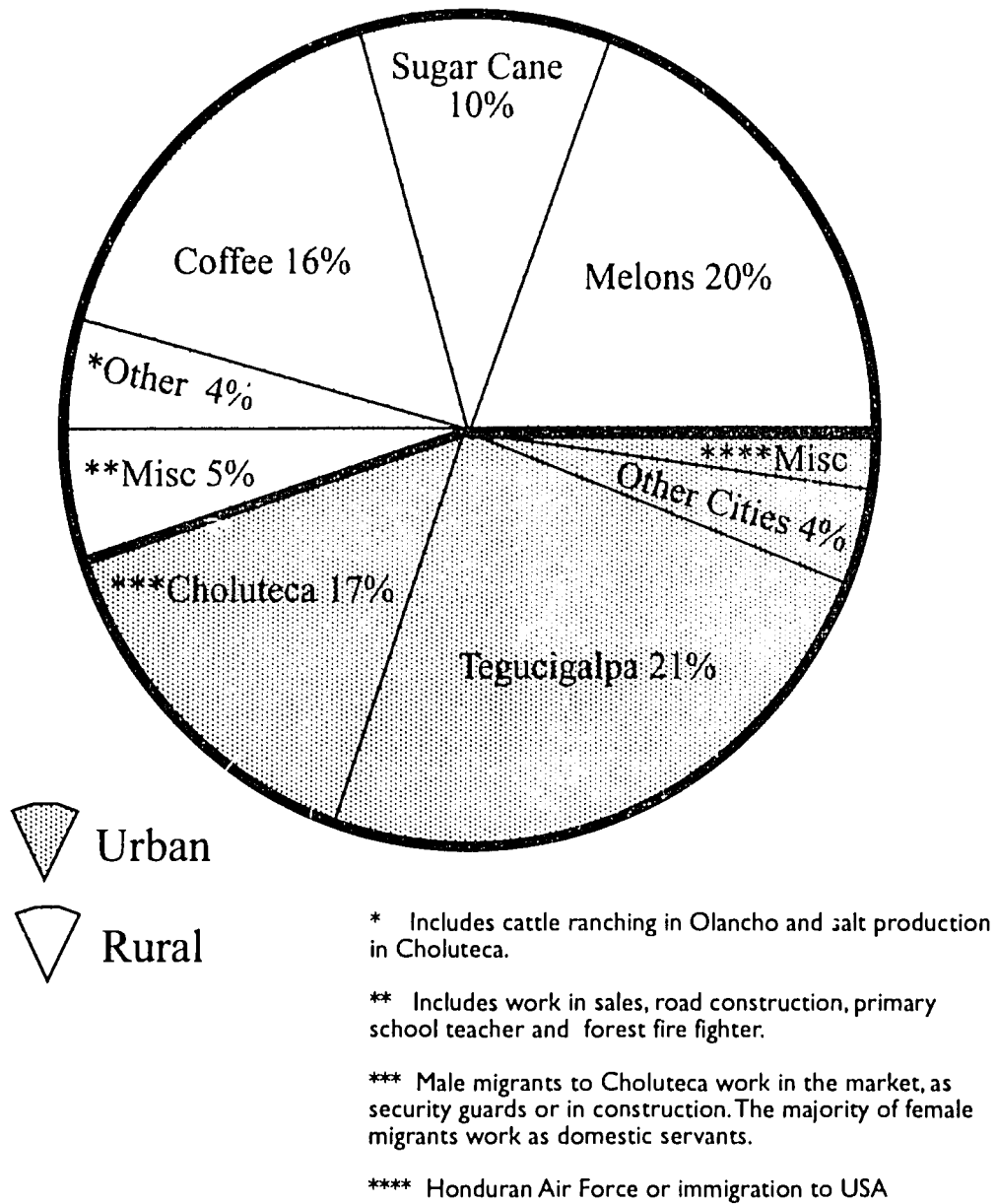
Seasonal work has many advantages, especially in El Zapote where dayworkers return home each evening. Many households are able to maintain their own farms so as to avoid complete dependence on wage labor. At the same time, the workers have no control over working conditions or wages. They are easily replaced, and employees who work less than 200 days per year do not qualify for any form of legal protection or benefits (Honduran Work Code, Article #347).

### **Urban Areas**

According to the Ministry of Labor in Choluteca, the most common or full-time job for men from rural areas in the city is working as security guards for local merchants. Job competition forces many men to accept wages lower than the minimum of L355 (US\$66) per month (1 *lempira* = \$.18). According to the employment registry, women and girls from the Linaca region and other rural areas most often apply for jobs as domestic servants. Many also find work as cooks or "sweepers" (Ministry of Work and Public Service/Choluteca, Employment Office Report for 1990-1992). Like seasonal workers, full-time domestic workers also remain outside of the work code, except for the provision of universally established vacation time (which does not guarantee paid vacation). Generally, the employer establishes salaries for domestic service (between L80 and L150 per month in Choluteca and about L200 per month in Tegucigalpa) which are significantly lower than wages received by rural men in the cities. The actual numbers of men and women who migrate to Choluteca from the uplands are not recorded since only those who consistently have trouble finding work actually utilize the job services offered by the Ministry.

Shifting migration patterns are reshaping the social fabric of the upland Linaca communities as they continue to support the changes in the export agricultural sector and the growing urban economy. Migration has become a valuable component of many household survival strategies. Wages from family members, who are seasonal migrants but resident in the community, along with occasional gifts from family members who are permanent migrants, allow many families to sustain the household economy at subsistence or above subsistence levels. These strategies, however, must be weighed against the obstacles presented by long-term migration of family members.

Figure 5: Destination of Linaca's Migrants



Source: Ecogen Field Data, 1992

## IV. Gender Roles, Responsibilities and the Control of Natural Resources

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In general, the men and women of the Linaca communities perceive themselves as subsistence farmers and "housewives." They de-emphasize the diversification of their roles and household economic resource base. They describe their activities outside of the subsistence agricultural system as peripheral or supplementary to their main gender-based roles. Their identities are still largely defined by entrenched cultural gender roles. As the local economy becomes market-oriented, however, men move more quickly than women out of roles related to subsistence and social reproduction and take on wage earning positions. Women assume multiple roles and responsibilities within their households and communities to make up for labor shortages without gaining access to or control over necessary natural and financial resources.

### Gender Roles and Responsibilities

Of the women surveyed in the Linaca communities, 94 percent described their occupations as domestic work. The tendency to assign low value to this role was widespread across communities, especially among women. Although many women participate in agricultural activities, only five percent of the women specifically identified their dual role in domestic work and agriculture. Though not highly valued, domestic work addresses essential, immediate household needs and occupies the greater part of the day. Thus, women must be able to effectively budget time and manage available household labor, usually that of other females and young children, in order to fulfill daily responsibilities. Women's daily tasks include preparing foods, fetching water two to three times a day, washing clothes, cleaning the house and *solar* (the yard around the house) caring for young children, caring for small domestic animals, maintaining household gardens, and doing any necessary activities of ill or absent household members. Linaca women single out grinding corn and making tortillas as the most important and time-consuming activity they perform in the course of a typical day (see Table 5).

Women rely primarily on their children for assistance with their daily activities. Several women noted the advantages of spacing children: a few older children migrate while others stay home to perform agricultural activities. The young children, especially girls, help fetch water and fuelwood and assist in other household chores. If women do not have children at home, younger sisters or other female family members living in or near the household

**Table 5: Process for Making Tortillas**

1. **Cook corn and/or sorghum daily (using lime or ashes to break down hull).**
2. **Wash grain, removing the hull.**
3. **Grind enough grain for one meal, immediately before making tortillas.**
4. **Add small amount of water to the *masa* (ground grain).**
5. **Forming and Cooking tortillas:**
  - a. **Further grind (to thin and soften) a small portion of *masa* (enough for one tortilla).**
  - b. **Form a flat circle either in the traditional method, patting the *masa* between the two hands, or by flattening it on a piece of round plastic on the countertop.**
  - c. **Cook the tortilla for 30 seconds on each side in a comal.**
  - d. **Repeat this process for each tortilla.**

work for the senior female of the house. Approximately 14 percent of the women reported working entirely alone or with minimal assistance from their spouse because they did not have family members within the community or had only very young children.

Although women's involvement in many farming activities is often based on the availability of other laborers within the family and the plot's proximity to the house, certain tasks are specifically considered women's responsibilities: cutting and gathering immature corn for household consumption one month before harvest; helping guard the corn before, during, and after harvest to prevent theft from animals, birds and neighbors; weeding, if chemical herbicides and pesticides were not used; and storing grains and seeds. In 26 percent of all households women participated in the harvest. In addition, women and female children thrash grains and process foods.

Women are involved with all stages of agricultural production in about 10 percent of the Linaca households. Almost all of these households are female-headed and do not have resident sons to handle the farm responsibilities. Women whose husbands and sons migrate for several months of the year (or who have left permanently) assume full responsibility for activities which are typically joint or male activities, e.g., land preparation and planting. Women are most integrated into the production of vegetables. The location of the vegetable garden, however, directly affects the degree of women's involvement and control. If the garden is located in the *solar*, the family considers it her project.

Men's responsibilities within the community vary from season to season. Sixty-three percent of the men claim agriculture as their chief occupation; 22 percent give equal importance to their agricultural work and other work such as raising livestock, seasonal work outside of the community and non-agricultural work within the community; 8 percent place their agricultural work as secondary to their non-agricultural occupations outside of the community. Their most important daily activities correspond with the agricultural calendar: preparing the land, planting, weeding, harvesting, and, in a few cases, selling grains, beans and other non-traditional crops. Other important work includes caring for cattle, gathering and transporting fuelwood and hardwood, as well as the construction and repair of live and wire fences, walls and houses.

Most men enjoy daily recreation time, playing soccer and cards or participating in community events. According to a women's group leader in Cerro Verde, "Women don't have the opportunity to participate in social events like the men do. Women don't have free time or even rest time, except at night; night is the only time when they can relax."

Women play a central role in informal support networks both within and among households. Their most significant contributions are in health, child care and gifts of food. In addition, many women often act as mediators during intra- and inter-familial conflicts and provide emotional support for other women, men and children in times of crisis. Daily woman-to-woman links also facilitate rapid communication of news and information throughout the community.

*According to a women's group leader in Cerro Verde,*

*"Women don't have the opportunity to participate in social events like the men do.*

*Women don't have free time or even rest time, except at night; night is the only time when they can relax."*

## Shifting Boundaries of Gender Roles and Responsibilities: New Asymmetries

Men, women and older children in a household traditionally work together to produce their subsistence. For the last several decades, households have supplemented subsistence production with income generated by selling commodities. The social division of labor, responsibilities and rights within this dual system is patterned around gender, age and socioeconomic status at the household and community levels.

An interdependence, of both cooperation and conflict, characterize gender and age relations within the household. This interdependence is often uneven, however, because of the gender and age-based access to and control over household resources and the community decision-making structures. As the household's dependence on commodities and wage labor increases, intra-household asymmetry intensifies. Men increasingly constitute and control the productive sphere while women maintain the reproductive sphere, through unpaid work associated with basic household needs (Bennholdt-Thomsen 1984; Beneria and Sen 1986; Merchant 1987; Tinker 1990). Women in the Linaca communities give less value to their contribution to the household economy because of the community-wide focus on production and remunerated labor. Further, women face the practical reality that deriving subsistence within the traditional domestic and common spaces is more difficult today than in the recent past.

*As the household's dependence on commodities and wage labor increases, intra-household asymmetry intensifies. Men increasingly constitute and control the productive sphere while women maintain the reproductive sphere, through unpaid work associated with basic household needs.*

One finds the greatest degree of complementarity between men's and women's work *within the solar*. If a household has a vegetable garden in its *solar*, the man (if present) helps his wife prepare seed plots and build fences. The woman maintains these structures and manages the vegetable production and harvest. Men usually control any construction within the *solar*, such as latrines, stoves, shelters or walls. Husbands and wives often negotiate about what happens within the *solar*. Compromises, however, are not always equally beneficial. Several women explained that often men had prioritized projects within the *solar* which were related to their own workload. Men are more likely to build and maintain walls or fences, for example, when they use the *solar* as a cattle corral. The construction of fuelsaving stoves, on the other hand, benefits both men and women.

Collaboration of all household members within the *solar* is especially important for those who do not have adequate access to land or forest resources. As this domestic space becomes a key focus within overall household livelihood strategies, women and men may shift in both spatial and functional gender relations.



## V. Adapting to New Realities in Resource Management: Environmental Degradation, Poverty and Outmigration

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The men and women of Linaca have extensive knowledge about the natural resources within and surrounding their communities. Given their decreased access to resources and increased demands, however, it is increasingly difficult for them to translate this knowledge into practice. Declining soil fertility, diminishing forests, increasing privatization of public forests and the growing outmigration of men and women challenge poor rural households to adapt their livelihood and natural resource management strategies. Many households attempt to secure their natural resource base and broaden income generating opportunities by: 1) utilizing more natural resource conservation techniques such as minimum tillage, rockwalls and tree planting; 2) strengthening the variety of tree and plant species available in their *solares* and the immediate vicinity of their homes; 3) undertaking a variety of new livelihood activities, including those based on forest products and those involving outside training; 4) responding to favorable market prices when possible, especially for non-traditional crops and meats; and 5) organizing community-based initiatives.

Following are some of the most common strategies implemented on household *solares* and agricultural plots by the men and women of El Zapote, La Picota, Agua Caliente de Linaca and Cerro Verde:

### **In the Solar**

Traditionally, households rely on timber and non-timber forest products for the elaboration of household utensils, shelter and storage structures, fuel and medicines. Women are most immediately affected by the loss of the forests, because they rarely own land and have traditionally relied on common land for many of the natural resources needed to fulfill daily tasks. As forests near human settlements disappear and as public land becomes privatized, households seek to develop resources within the *solares*. Many of Linaca's households are placing greater value on the diversity of their domestic plant resources (see Figure 7). In fact, 56 percent of all households planted new trees within the past five years.

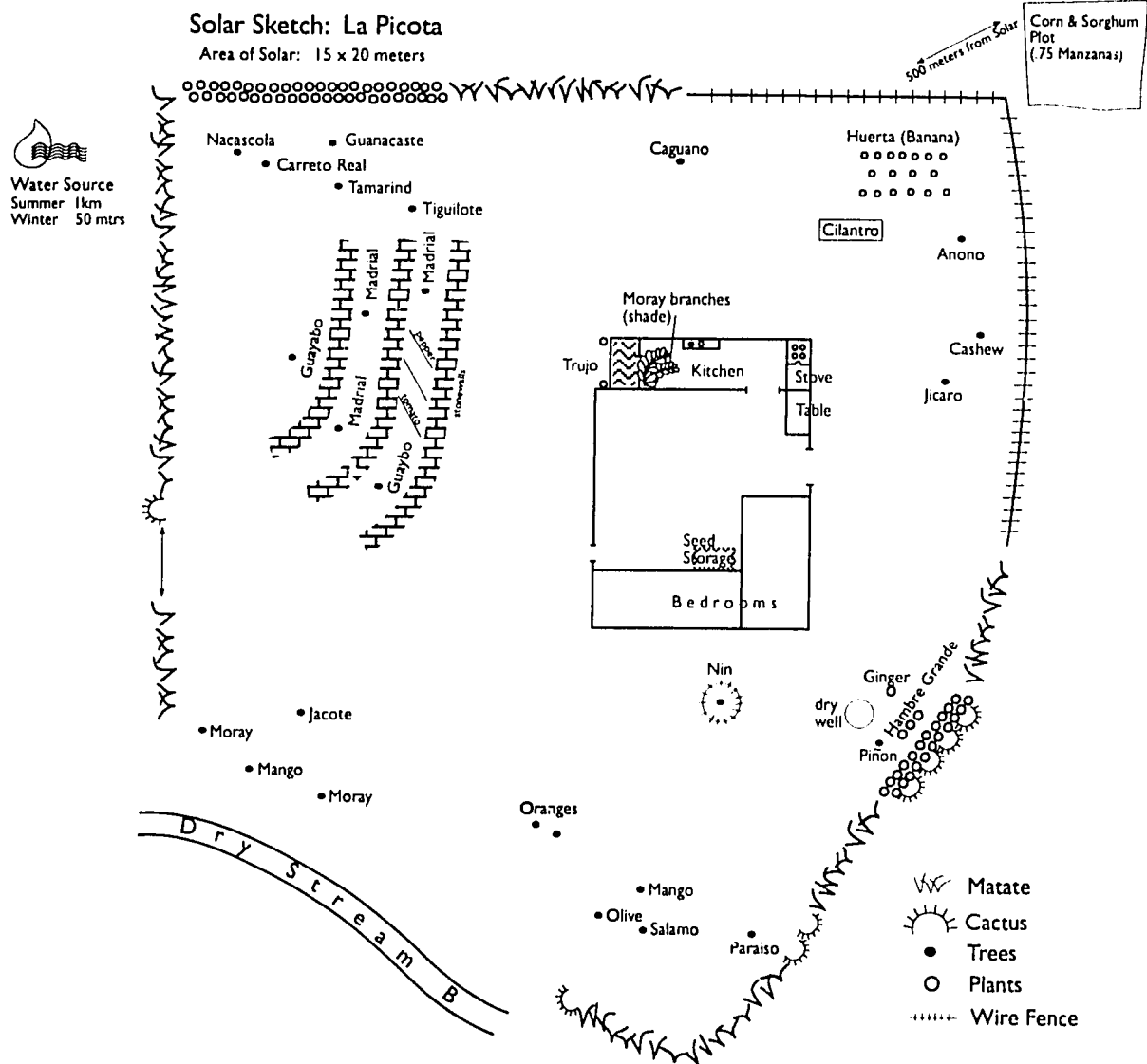
### **A Tree Planting Strategy**

Tree planting is widely practiced in all communities, reflecting the declining access to trees throughout the region. More than a third of the households have planted fruit trees in their *solares*. Fourteen percent planted fuelwood trees, 11 percent planted hardwood trees and nine percent planted trees specifically for their medicinal purposes. Species preferences correspond with gender-based household responsibilities: Men prefer the fast growing fuelwood and hardwood species; women expressed equal interest in both fruit and fuelwood trees. About 35 percent of the women described their ideal tree as a multiple-use tree which also includes medicinal properties.

### **Vegetable Cultivation**

As the men and women of Linaca's households struggle to produce adequate supplies of basic grains on smaller plots of land and to prevent malnutrition in their children, the need for household gardens has

Figure 7: Domestic Plant Resources and Their Uses in a *Solar* in La Picota



**Trees/Plants - household uses**

- Anono - fruit
- Caguano - wood for posts and beams
- Carreto Real - hardwood
- Cashew - leaves for cough; bark for diarrhea; fruit for drink high in vitamin C
- Cilantro - herb for coughs and influenza; herb/spice
- Ginger - root for stomach ache
- Guanacaste - wood and shade
- Guayabo - leaves plus cashew and salamo for severe colds; fruit
- Hambre Grande - herb for amoebas and dysentery
- Jicaro - bark for cough; gourdes for utensils/storage; seeds for drinks; feed for cattle
- Jacote - fruit

- Madrial/Madreado - used in agroforestry; leaves for organic fertilizer
- Mango - fruit
- Matate - live fence; juice of leaves for ear aches
- Moray - fuelwood and shade
- Nacascola - wood for fenceposts; bark for toothaches
- Nin - for diarrhea in chickens and cattle
- Olive - fruit; used to help accelerate birth
- Paraiso - ornamental and shade
- Piñon - seed used as soap ingredient
- Salamo - bark plus jicaro seeds for cough
- Tamarind - fruit
- Tiguilote - flower for cough; wood for posts, house construction or fuelwood; fruit



increased. Many women have great interest in growing garden vegetables (and approximately 30 percent have had successful gardens), but claim that they have little access to seeds and water. (None of the development organizations which provide agricultural extension services in the region have prioritized seed collection and storage.) Some women have begun to utilize techniques such as rockwalls, minimum tillage and contouring to increase the productivity of gardens within or near their *solares*. While only 20 percent of Linaca's households use one or more of these techniques, 85 percent of those households are managed by women who do not have resident partners or whose spouse or sons migrate for more than four months each year.

Some women, who have insufficient access to water and fertile soil or do not have the time and space to develop gardens within their own *solares*, have attempted to organize group garden projects. Most groups are short-lived, however. The exceptions are two successful groups who have managed collective gardens in El Zapote and La Picota for over three years.

### **Medicinal Plants**

Traditionally, the majority of Linaca's population has used knowledge of medicinal plants. Young girls and boys learned plant uses by observing their mothers' preparation techniques, participating in plant gathering and receiving treatments from *curanderos* (traditional healers).

Today, the increased scarcity of the wild plants and an increase in access to modern health services have caused a reduction in the use of traditional medicinals. Most women in Linaca, however, reported that the regional health centers cannot fulfill local demand for low-cost community health care. Therefore, many women plant medicinals in their *solares* and continue to prepare traditional infusions, inhalants and compresses for a broad range of illnesses. In addition, they combine traditional remedies with medicines purchased in the community general stores. As a result, children learn to recognize many plants and incorporate available resources into household remedies.

## **In The Parcela**

### **Soil Conservation**

Rockwalls for soil retention are visible in all of the communities on several of the steep upland agricultural plots. The actual number of households utilizing this and other soil retention practices is quite low, however. Thirteen percent of households have built rockwalls, 24 percent planted trees, nine percent practiced minimum tillage and five percent practiced contouring. Most farmers have not adopted minimum tillage because they found the practice too labor intensive. Over 60 percent of farmers who did not own the land they cultivated had not made significant investments in long term soil conservation projects, especially rockwalls and tree planting. Most of the rockwalls in the four communities were constructed by men's groups, initiated by the Ministry of Natural Resources in the mid-1980s.

### **Practices for Clearing Land**

Men are almost exclusively responsible for the preparation of the land for cultivation. Many small farmers in the communities still practice traditional swidden agriculture in their *parcelas*. There is, however, a growing recognition of the long term disadvantages of burning, e.g., increased vulnerability to erosion, unintentional loss of trees and loss of beneficial pests. Several men and women credit the education provided by the Ministry of Natural Resources in the mid-1980s with the changes in attitudes about burning (see Chapter VI).

Laws prohibiting the felling of trees along watersheds have been in effect since 1912. These policies have helped to preserve trees immediately along riversides. Burning, however, has never been completely prohibited, although the Honduran Government (through the Honduran Cooperation for Forest Development or COHDEFOR) required farmers to seek permission before burning. According to a COHDEFOR forester in Choluteca, only the small farmers, "the most humble and poor," observe the regulations and apply for a burning or clearing license. COHDEFOR and Natural Resources extensionists trained several men to burn responsibly. The Agricultural Modernization Law (1992) and the Law of the Municipalities (1991) have now transferred the responsibility of forest protection to individual landowners. The implications of these changes have not been documented.

## Home-Based Industries

Home-based industries provide households with vital supplemental income and often rely on local natural resources. For example, a few women in most of the communities produce small quantities of clay pots, water containers, jars and *comales* (for cooking tortillas) to sell locally. A woman head-of-household in El Zapote who began a business specializing in the production of the clay *comales* in order to support her family said: "After my companion left me, the *comales* were father to my seven children."

Some women in the communities bake items to sell, such as corn *rosquillas*, *quesadillas*, and *tortillas*. They also sell some produce and locally made milk products including *cuajada*, a soft cheese. Many more earn income from unprocessed food stuffs, such as eggs, chicken or fruits.

Men make almost all building materials within the community. Adobes, made from manure, clay, grass and water, are used and sold locally as are clay roof tiles, fabricated with manure, clay and sand. Local trees are the source of wood structures such as houseframes, doors, chairs and fences. Many men sell beef, pork, sesame, rice and surplus crops. A few men still sell fuelwood, despite the dwindling supply, low market price and high transportation costs.

## Improving Water Quality

The prevention of water-borne diseases is a key concern for Linaca households, especially for women who are responsible for the daily acquisition of water for household consumption. Practices such as boiling or chlorinating covered water sources are gradually spreading in the region. Nearly one-third of the households reported having access to a frequently chlorinated source, but, as concerns for cholera have decreased in the region, supplies are only available upon direct solicitation from the Ministry of Health. Many women, including those who rely on open natural wells and rivers as their primary water source, use traditional water filters, made of thin clay jars. This process, however, only strains the largest microorganisms.

Women are the daily managers of traditional water sources, whereas men have assumed management and control of the new water systems (i.e., water pumps, pipes and chlorination). Because of women's daily involvement with water systems and the frequent absence of men, their exclusion from water committees and technical training disadvantages the entire household. Many women complained that they are unable to make repairs because of a lack of skills or equipment.

## Shifts in the Boundaries

For all families in Linaca, especially those with very little or no access to wage income, the maintenance of a diverse collection of natural resources within the *solar* or in their agricultural plots profoundly affects the quality of life of the entire household. These resources provide for many daily household needs and a potential supply of materials for small home-based industries. These are a valuable source of income for poor households and for women who must support their families for many months of the year.

The conservation and improvement of the natural resource base in the *solar* and on the farm is an enormous challenge. These activities are labor intensive, time consuming and require the initial investment of financial and natural resources. As the men and women of Linaca struggle to fight poverty, conserve and revitalize their natural resource base, and seek new sources of income, they look beyond the boundaries of their own property and families to collaborate with other community members. They are working with regional institutions and community-based organizations in the hope that they will create new options unavailable to individual households.

# VI. Institutional Networks, Local Participation and Gender

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## Social Relations and Community Organizations in Linaca

Household coping strategies to confront environmental degradation, low agricultural productivity and limited income-generating opportunities are not confined to individual *solares* and agricultural plots. Over the past 20 years a network of community organizations involving both men's and women's groups has gradually developed. This network indicates an increasing tendency to find group solutions to community-wide problems. In addition, the growing involvement of women in community-level processes since the late 1970s marks a change from traditional restrictions on rural women's activities outside their homes.

Community-based group activities are a means through which Linaca's residents combine efforts to gain greater collective access to natural and financial resources. At the same time, these groups also serve as the point of intersection between external organizations and the local population. While migration exposes individuals and their households to the larger political economy of the region, the entrance of many governmental and nongovernmental organizations into the area has introduced external influences into daily community life.

The three local institutions with the longest histories and greatest influence in each of the communities are the Roman Catholic Church, the primary school and the *patronato* (Council of Community Development). The reasons for their longevity include the continuous external support from the Archdiocese of Choluteca, the Ministry of Education and the Municipality of Choluteca, and the maintenance of a small leadership structure within the community. These institutions form the core of all of the community institutional networks. Most community groups (such as the Housewives' and Youth Clubs, Parents' Associations and Soccer teams) were formed by or established linkage with one of these institutions. These institutional networks are a key source of legitimacy at the community level (see Figure 8).

In the mid-1980s, other regional governmental agencies, including the Ministry of Health and SECOPT (Secretariat of Communications, Public Works and Transportation) began to work more directly with the men and women of Linaca and their local institutions to address aspects of upland poverty, especially health, nutrition and infrastructure. The government implemented food-for-work infrastructure projects with work crews of local men. Women were targeted as beneficiaries of rural welfare programs, especially health and nutrition. Most of these programs have not addressed the larger structures which perpetuate the impoverishment of the upland communities. They focus on short-term solutions within the restricted space available to the local residents. Project planning and implementation processes tend to focus on traditional gender-differentiated activities, often reinforcing ideological definitions rather than fostering rights which should accompany shifts in practical gender roles and responsibilities.

*Project planning and implementation processes tend to focus on traditional gender-differentiated activities, often reinforcing ideological definitions rather than fostering rights which should accompany shifts in practical gender roles and responsibilities.*

## **Community Organizations And Natural Resource Management**

In addition to the groups which formed under the auspices of the Catholic Church, the schools and the *patronato*, other governmental and nongovernmental organizations have involved the residents of the Linaca communities in a number of short-term projects. In the early 1980s, these organizations began to focus on natural resource depletion and linked issues of environmental degradation to increasing levels of poverty in rural Southern Honduras. The following four organizations illustrate several fundamental shifts in the conceptual and methodological approach to rural development in Southern Honduras over the past decade. These include: 1) addressing the sources of natural resource depletion, 2) moving away from food-for-work and welfare service to training and education for sustainable development, and 3) eliciting greater levels of participation of both local men and women as active resource managers.

### **COHAAT/COHASA**

COHAAT (Honduran-German Cooperation, Food for Work) was one of the first multi-purpose nongovernmental organizations to establish both men's and women's groups in the region. COHAAT was initially created in 1974 as an emergency food aid program to assist victims of Hurricane Fifi on the northern coast of Honduras. Because of a governmental request and the growing regional crisis caused by droughts, pests and floods, the organization moved its headquarters to Choluteca and initiated a series of basic infrastructure projects, including road repairs, well and latrine construction and several garden projects. Community members working in COHAAT projects received food rations as incentives. When COHAAT withdrew from the Linaca communities between 1988 and 1990, neither the men's nor women's work groups continued activities independently.

In 1990, COHAAT changed its name to COHASA (Honduran-German Cooperation for Food Security) — reflecting a move away from the food for work methodology which had created local dependency on outside food, materials and leadership. COHASA attempted to increase the local sustainability of their projects by incorporating men and women into the same groups and training local "paratechnicians." The implementation of gender-integrated programs in Choluteca, which included the elimination of the women's department and specific women's projects, only had limited success for two reasons. First, group members, especially women, were rarely incorporated as decision-makers in the projects. Community members had little opportunity to define problems, prioritize proposed projects and participate actively in planning, implementation or evaluation. Second, COHASA primarily trained men to serve as paratechnicians in the region. In practice, these men were trained as local contacts to support the organization's programmatic goals rather than as potential, local leaders.<sup>7</sup>

### **The Ministry of Natural Resources**

In 1983, the Ministry of Natural Resources of the Government of Honduras initiated the "Management of Natural Resources Project" as a response to the severe environmental degradation and declining agricultural productivity on hillside farms. Like most government projects, it also provided food for work. The project's technical assistance focused on soil conservation, primarily rockwalls and reforestation techniques. Extension agents encouraged the formation of men's groups to build rockwalls because of the intensive labor requirements of the project. They also emphasized the disadvantages of burning cornfields and pastures as a yearly land preparation technique. As a result, burning practices have dropped significantly in Linaca since the mid-1980s.

For the first several years, the project overlooked rural women's role in conservation and natural resource management. A women's program was added at a later stage, but never achieved more than a secondary or "add-on" status throughout the region. Only a small group of women in La Picota and Agua Caliente reported having worked with the project's natural resource extensionists on a short-term household garden project. Nevertheless, this government effort to raise the consciousness of the people about environmental issues has had a lasting impact. The residents surveyed in the four communities remember the messages about the disadvantages of burning and the rockwalls are still maintained.

## **LUPE**

The Land Use and Productivity Enhancement Project (LUPE), a United States Agency for International Development-funded activity initiated through the Honduran Ministry of Natural Resources in 1989, assists small hillside farmers in improving agricultural productivity and natural resource management techniques. LUPE has moved away from the top-down, food-for-work approach and now highlights education, training and local capacity-building. LUPE has also extended its technical assistance to incorporate women more actively.

LUPE's local men's groups have focused on agroforestry techniques and soil conservation. In addition, male extensionists have also promoted minimum tillage with the use of organic fertilizer, and several non-traditional crops, such as sesame and a feed variation of sorghum. LUPE initiated community groups through male contact farmers who were trained as "paratechnicians." The goal of the women's subcomponent of the project aimed to encourage creativity, help rural women learn to become decision-makers and leaders, and provide women with training and technical assistance. The Women in Development specialist from the Linaca extension agency worked with women's groups on fuelsaving stoves, home improvements, vegetable gardens and food preparation. By mid-1992, LUPE had outlined plans to train women volunteers to provide continuity for the women's activities.

In mid-1992, LUPE still faced great challenges in incorporating women more fully in the design and implementation of local projects and in decision-making processes. Extension methods relied on the project's "WID package" of activities rather than shaping projects around local women's priorities. In addition, women's activities remained peripheral in overall natural resource management efforts.<sup>8</sup>

## **PRODESAI**

Another development organization that worked in the Linaca region was the local World Neighbors group, PRODESAI (Choluteca Integrated Agriculture Development Program). PRODESAI, which addresses issues of agricultural productivity, soil conservation, health and nutrition, has trained local community members to work as their extensionists and permanent staff. One PRODESAI local extensionist, Doña Moncha, lives in Cerro Verde and serves as a model for others (see profile below).

PRODESAI, an exception among the many nongovernmental and governmental organizations working in the area, trains and incorporates local men and women as active agents of change in their communities. Also, it has nurtured the formation of a local organization, UCAMNE (Union Campesina en March, Nueva Esperanza), which planned to continue PRODESAI's initiatives when it withdrew from the region in July 1993. This organization was founded and is now managed by the local men and women extensionists trained by PRODESAI.

### **Profile of Doña Moncha**

Doña Moncha lives with her husband and five children in a two room house with a clay tile floor, built during her involvement with PRODESAL. She works two mornings a week in four communities as a health promoter for community women's groups. She received a small salary from PRODESAL for the work. Doña Moncha and her family use their *solar* to demonstrate several techniques taught and promoted by World Neighbors. They have constructed stonewalls and small contoured terraces using live barriers of lemon grass and valeriana (both used for medicinal purposes). Both the contours and living barriers help contain soil and moisture. Using minimum tillage, they grow corn, *camote*, tomatoes, green peppers, *ayote*, *achote*, as well as basil and other herbs used as condiments and medicines. They have planted *leucaena* and *madreado* trees to use for fuelwood and for organic fertilizer. They also have several fruit trees: mango, tamarind, papayas, *jocotes* and sour lemon. Everyone in the family participates in maintaining the garden. Doña Moncha emphasizes that the size of her *solar* is similar to those of her neighbors' and her access to water is also limited. She hopes that her example will enable other women and men to believe that they can also have productive gardens.

Doña Moncha is proud to be one of the founding members of UCAMNE (Peasants' Union on the Move, New Hope) which a group of local extensionists established to continue health, agriculture and natural resource management training in the region after PRODESAL concludes its program.

## **Levels of Participation in Community Organizations**

The organizational network which has emerged in each of the four communities involves governmental and nongovernmental institutions from outside the community. Nonetheless, participation in community groups, initiated either from within or outside the community, has remained low and coordinated group efforts to manage natural resources are still new to many men and women in the region. Involving community members as active participants has been a challenge for community organizations. An average of 65 percent of Linaca's men and women had been involved in some community group prior to 1991. At the time of interviews in mid-1992, only 8 percent still belonged to those same groups and another 25 percent had joined new groups in 1991 or 1992. The level of participation in community groups has fluctuated based on a variety

### **Factors Limiting Successful Participation of Linaca Residents in Community Groups**

- 1. Time and household labor limitations**
- 2. Migration**
- 3. Unwillingness to make long-term investments in conservation efforts on borrowed or rented land**
- 4. Family illness**
- 5. Lack of incentives or compensation for work (food or small salary)**
- 6. Lack of land around the household limiting women's participation in household garden groups**
- 7. Male disapproval of women's participation**
- 8. Some residents' mistrust of extensionists from outside the region**

of social, economic and environmental circumstances. The extension staff of COHASA, LUPE and PRODESAI and the women and men of Linaca identified the following eight key factors limiting consistent participation of Linaca residents in group activities.

## **Gender Roles in Community Groups**

A growing acceptance of women's activities outside of their immediate households, and the decreased participation of men who must leave the community in search of work, has created a greater balance in the number of men and women who are involved as active community group members. Nonetheless, women's and men's group activities still remain highly gender specific. The primary activities carried out by women's groups include: home improvements, horticulture, church activities and food preparation. Men reported involvement mostly in construction and farm improvements. Despite the tendency of organizations to target men for natural resource management projects and training, equal numbers of men and women said they had been involved in such activities. This suggests that organizations incorporated assumptions about traditional gender roles which do not reflect the realities of daily community life.

The boundaries which have shifted most significantly for women are spatial. As one woman from Cerro Verde stated, women move with greater ease beyond the "four walls of their houses and the paths between the *solar* and the wells," somewhat reducing their traditional isolation. They have not, however, gained significant decision-making power. Women do not have the same freedom to make individual decisions about their level of involvement in different community groups as their male counterparts do.

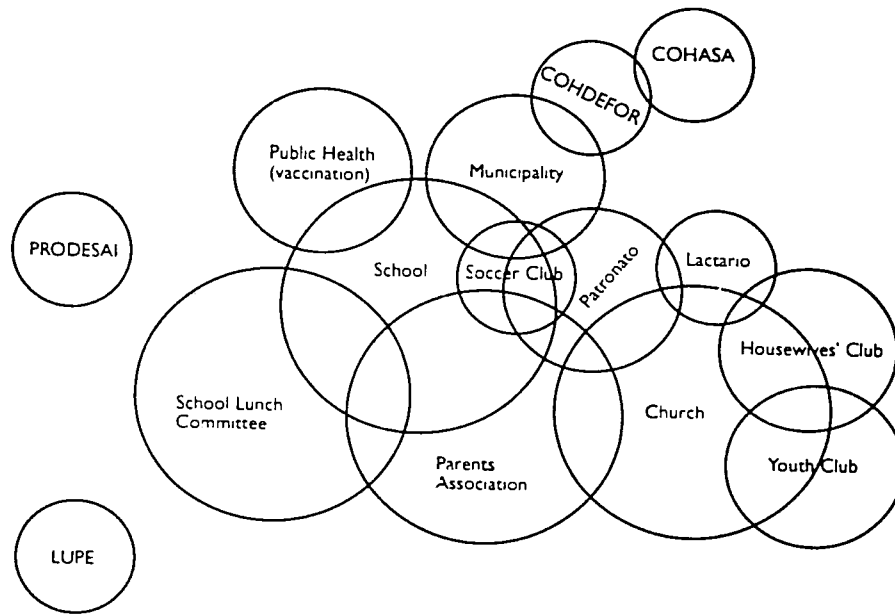
*Women do not have the same freedom to make individual decisions about their level of involvement in different community groups as their male counterparts do.*

Individual farmers and households in Linaca are not isolated from the broader social and institutional structure of their communities. Through in-depth household interviews and focus group discussions with both men and women, the research team constructed detailed diagrams of each community's network of institutions. The resulting diagram shows the interconnected nature of both local and regional institutions, and also identifies the core institutions, discussed in the beginning of this chapter, with which all other institutions have a significant relationship.

Figure 8 illustrates the importance of gathering information about existing community organizations from both women and men. Perceptions of an organization's importance tend to correspond with gender-specific priorities and involvements. For example, men ranked nutrition programs and church clubs lower than the women because of their lack of direct involvement in these activities. In addition, the women identified COHASA and COHDEFOR's involvement in the community because they were only working with women's groups in El Zapote. In El Zapote, most women had knowledge of all community groups, whereas most men had little knowledge of women's groups and their activities. Both the women and the men perceived LUPE and PRODESAI as minimally influential and separate from El Zapote's institutional network, without linkages with the core institutions. In other communities, where these organizations were connected with the Church or School, they were ranked higher by both men and women, and had larger group membership.



## Women's Perceptions



Source: ECOGEN Field Data, 1992

Focus groups of men and women, through a process of dialogue and consensus-building, ranked each organization's importance (represented by the size of the circle). Using paper circles each group constructed diagrams indicating the relationships between and among different community institutions. Men and women ranked the significance of community groups for local welfare very differently. This exercise provided extensive information about men's and women's relationships with and attitudes about local and regional organizations. For details on how to conduct group discussions on community perceptions of institutions, see NES et al., *Participatory Rural Appraisal Handbook*, 1990.

## Men's Perceptions

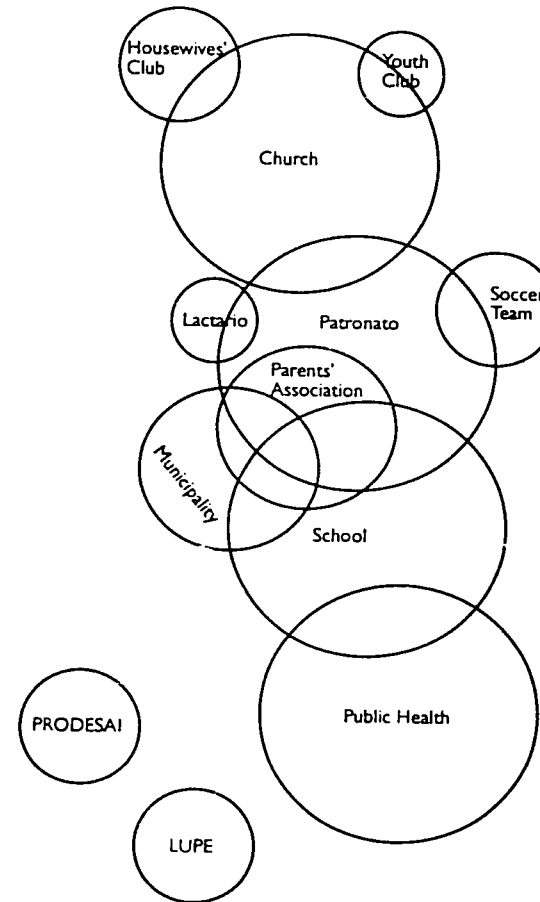


Figure 8: Gender Perceptions of Institutional Networks in El Zapote

## A Shift to Local Leadership

The overall philosophies of the latest generation of development organizations emphasize the need to expand the sustainability of community groups and their natural resource base. COHASA, LUPE and PRODESAI have worked with similar goals, but they all faced significant obstacles during project implementation.

*Community participation in defining problems, prioritizing projects and proposing solutions has not been a key feature of most development organizations active in Linaca. . .*

*Without the participation of Linaca's men and women as decision-makers and managers of their own development and management of the natural resource base, it is unlikely that these groups will establish greater permanence and sustainability at the community level.*

what we should do next. They are happy with our work, but we never see them again." While groups such as PRODESAI have introduced participatory approaches to community development, these perceptions, which stem from decades of experience, will not change quickly.

Community participation in defining problems, prioritizing projects and proposing solutions has not been a key feature of most development organizations active in Linaca. They have trained paratechnicians to perform the tasks necessary for the successful execution of their organizational mandates. This training, however, has not prioritized leadership and management skills. In addition, the daily constraints and preferences of men and women are rarely incorporated into diagnostic studies which almost all organizations use to structure and validate their project plans. Without the participation of Linaca's men and women as decision-makers and managers of their own development and management of the natural resource base, it is unlikely that these groups will establish greater permanence and sustainability at the community level.

The legacy of the project-oriented methodology and food-for-work strategy of many governmental and nongovernmental programs, produced a great deal of resistance and mistrust of these new groups in Linaca. These organizations, therefore, continue to struggle to prove themselves or win support for their projects to the local communities.

In community-wide meetings held by the ECOGEN research team to discuss preliminary findings, both men and women expressed their frustration and disillusionment caused by the thirty to forty-year history of temporary fixes and inconsistent institutional support provided by nongovernmental and governmental agencies merely passing through. One community leader felt great apprehension about interacting with government workers and extensionists from outside the region because, as he described it, "they all sing the same song, just in different voices and often with different instruments....In the end, when we have completed their projects, they all leave and we are left alone to figure out

## VII. Findings in the Linaca Communities: Gender Roles and Community Resources

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Following are the central findings about the ways the men and women of the uplands of Southern Honduras are managing their resource base and striving to sustain their families under circumstances of resource degradation, increasing pressures on the land, and increasing incorporation into the broader Honduran political economy.

### **Gender-Differentiated Roles**

Amid social, economic and physical change, people are renegotiating gender relations at the household level to cope with crises and uncertainties. Such renegotiation is increasing as men, in particular, seek wage employment outside the community. For the majority of households, both women and men are active participants in the daily management of their natural resources and household economies, but clearly within a gender-differentiated context. Most agricultural plots in Linaca are worked and controlled by men, whereas women exercise greater authority in the *solar* where they produce and maintain many natural resources. It is also in the *solar* that men's and women's work overlap most, and where collaborative efforts are most common.

### **Increasing Responsibilities Without an Increase in Control for Women**

Cultural attitudes and social behavior based on gender continue to restrict women's mobility and decision-making capacity in rural Choluteca. As families in the uplands strive to secure their sustenance, roles and responsibilities for many women have multiplied, but their access to and control over both natural and financial resources have remained disproportionately low. The principal sources of income generation remain predominantly in the hands of male household members. Overwhelmingly, men inherit, purchase and rent land, yet women are often those who remain in the communities year-round and must make daily decisions about the land and other natural resources when the men migrate. Male heads of households are credited with the largest contributions to the household because they can find work for wages more often than women can. However, several family members, including the females, add financially to the household economy from a broad range of formal and informal income generating activities. When contributions are measured to include labor, subsistence inputs, household production, and participation in local support and exchange networks, the value of women's work rises significantly.

### **Migration: A Household Response to a Declining Resource Base**

Seasonal and permanent migration are two common household responses to the increased population pressures and the declining land, water and forest resources in the Linaca communities. At the same time, however, migration has contributed to the modification of long-standing and culturally-defined gender roles. Because the income generated from wage labor outside of the community has become increasingly necessary, families, especially women and children, must often make uncomfortable adjustments for labor lost to on-farm production and for the weakening of extended family support systems. Linaca's migration patterns reflect some of the ideological restrictions inherent in the community's established gender roles. Women face

the greatest limitation in the pursuit of wage earning opportunities outside of the communities. The majority of Linaca's households include both spouses, most of their children and often several extended family members. Increases in male outmigration, however, have created many *de facto* female-managed households in all four communities.

## **Conserving the Resource Base for Local Sustainability**

The women and men who do maintain their primary residence in Linaca recognize the value of conservation and sustainable utilization of their natural resources in their *solares*, on agricultural land and at the community level. Many of the efforts to prevent further natural resource degradation and to rehabilitate plots of land are individual family endeavors. Activities include the use of organic fertilizers, maintenance of rockwalls, a reduction in the use of swidden techniques, and an emphasis on tree planting. Most of the men and women who are willing to improve the land are those who own it or who feel secure in their access to borrowed land.

## **Community Organization in Linaca**

The gradual development of a network of community organizations over the past 20 years indicates an increased willingness to find group solutions to community-wide problems. Both government agencies and international nongovernmental organizations have initiated new community organizations which address natural resource management and community development issues in Linaca. The extensionists, program coordinators and project designers have helped provide vital infrastructure, food supplements, temporary employment opportunities, as well as new information and technologies. Many community members report a direct link between the Ministry of Natural Resources' projects in the region, for example, and their increased capacity and interest in pursuing conservation techniques on-farm and in the reduction of annual burning of agricultural plots and pastures.

Despite the positive impact of some development organizations in the uplands of Choluteca, the implementation processes of the majority of them have limited the level of local participation, rarely incorporating the women and men of the communities in leadership or management roles. Women's priorities, in particular, are usually addressed as "add-ons" to projects. Overall, levels of community participation in group activities, initiated from outside the community, have remained relatively low.

## **A Legacy of Dependency**

Two decades of the "food for work" and welfare approaches to development have nearly institutionalized patterns of dependency in community relations with outside organizations. Community members have learned the role of beneficiary, and, over time, have translated this externally imposed status into their own expectations. Recent shifts in development paradigms emphasize sustainable development, technical assistance and training, and require changes in the ways local men, women and institutions relate to outside organizations. The mixed records of success and failure, in addition to local experiences with the short-term project orientation of the recent past, have caused many community members to keep their distance from these new groups. The legacy of dependency and lessons learned through previous work with outside organizations are obstacles to men and women in the communities and to the organizations currently attempting to shift their goals towards local sustainability and empowerment.

## VIII. Policy Recommendations for Building Equity and Community Participation in Natural Resource Management

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The insights gained from the analysis of the shifting boundaries of a rural livelihood system in the foothills of Choluteca can help development policy makers and practitioners build more effective and equitable policies, programs and projects across local, regional and national levels. Key policies can begin to address issues of scale, linking macro issues and micro-level resource management capabilities. These issues can then be more effectively incorporated into development project design, implementation and evaluation.

### **Policy Options**

#### **Protecting the natural resource base for men and women in the upland communities**

The inequities and marginalization processes generated by the expansion of large-scale export-oriented agriculture have clearly disadvantaged the upland communities in terms of access to land and other natural resources. Moreover, there is a fundamental incompatibility between the objectives of many large agribusinesses and the maintenance of regional natural resources for the use of small-scale farming households. The local government can play an active role to promote compromises and enforce regulations which secure forested areas, common water sources within regional watersheds and other natural resources vital to the sustainable livelihoods of local populations. Sustaining the local natural resource base is especially critical for women and children who remain within the communities year-round and are responsible for daily necessities.

#### **Enforcing the rights of male and female migrants**

Increasingly Linaca men and women are being drawn into a wage labor force, which functions seasonally or permanently beyond its borders. While migrants and their households are eager for the income, the returns are often minimal and conditions are difficult. It is evident that these migrants are joining the broader economy on disadvantageous terms. The promotion of new non-traditional crops in Southern Honduras, such as melon and shrimp, has favored the large plantation economy and the landed oligarchy (Stonich 1992). The export agricultural sector has provided seasonal wage labor for the Linaca residents, especially men. Overall, however, the legal, socioeconomic and political frameworks are biased against the local upland poor, particularly women.

The situation of these Linaca migrants is illustrative of circumstances existing at the national, regional and local levels in much of Honduran society. There are acute inequities in employer and employee relations within both the export agricultural sectors and the urban economy. Young teenage girls, for example, depart from Linaca to seek employment as domestic servants in Choluteca or Tegucigalpa. The Honduran Government can initiate legislation and regulations which expand rights of labor, protecting both male and female, temporary and permanent workers and establishing standards for both living and working conditions. Both

governmental and nongovernmental organizations can contribute to education, monitoring and enforcement of these rights.

### **Building sustainable and effective local organizations**

Obstacles which restrict men and women from participating more actively in community development processes have contributed to the maintenance of structures of inequity which disadvantage these rural populations. Government and nongovernmental organizations can promote local efforts to develop locally-based institutional networks, which link the growing number of economic and social activities in the communities with regional and national institutions. Such democratic initiatives could significantly increase the level of control local men and women have over their own communities and livelihood systems. To help sustain these networks and local organizations, government programs and nongovernmental organizations could help develop local leadership capabilities, provide an enabling environment, and offer appropriate assistance and support from the national and regional levels. Special attention should be given to women who are more frequently excluded than men from training opportunities and decision-making processes.

### **Improving local transport and marketing systems**

Improvement in local transportation systems, including buses and roads, would enable Linaca to gain better access to regional markets and job opportunities. A reliable means of travel to and from the upland communities may also help to decrease the rate of abandonment of families by migrants as well as the amount of time migrants must be absent from their households. Efforts to improve local transportation systems could be linked to public works and increased employment opportunities through SECOPT, the Secretary of Public Works and Transportation. Improving access to regional markets increases the viability of the local economy and expands livelihood options for men and women. This is especially important for those women and men who are developing or trying to sustain home-based industries or to market local goods and products.

## **Incorporating Gender into the Project Cycle**

### **Enhancing project design by promoting projects and technologies which support local knowledge**

The wealth of indigenous knowledge, strongly rooted in gender-based roles and responsibilities within rural livelihood systems, should be recognized and incorporated in the design and planning of rural development programs. For example, the knowledge of local plants for medicinal purposes or of forest products for making household objects can inform design processes for health programs and income-generation projects. The interactions between scientists/extensionists and local men and women are vital in fostering a real dialogue and sharing of knowledge. This exchange of ideas can contribute to the sustainability of development efforts and the natural resource base.

### **Using gender-sensitive tools throughout the project cycle**

Incorporating various gender-sensitive research tools, such as gender mapping techniques or the gender-disaggregated seasonal activities calendar, can help inform all aspects of the project cycle. Such tools assure sensitivity to gender-based needs in project design, promote effective and equitable implementation, and incorporate gender as a key variable for monitoring and evaluation. They also provide opportunity for

project planners to assure that women are gaining levels of control over resources commensurate with their responsibilities. In using such tools, extensionists will understand the needs of local communities more completely and, in turn, be able to respond more effectively to those needs. The communities themselves can also use these tools to prioritize local initiatives.

### **Enhancing project implementation through leadership training and local empowerment**

To date, attempts to expand local participation in community level projects have focused on the training of “paratechnicians,” local volunteers who act as liaisons between the community and their extension staff. Ideally, these volunteers should continue some elements of the organization’s programs once they have withdrawn from the community. The paratechnician approach observed in the Linaca region did not explore rural people’s own knowledge, which is often gender-based due to gender role definitions in the communities. Rather, this approach acknowledged that rural people have the capability to learn skills and perform activities outlined by the acting institution or agency. It can expand the role local men and women play in development projects, but this should not be mistaken for leadership training or empowerment through more equitable decision-making processes. Given the legacy of dependency in Linaca, nongovernmental and local or regional governmental programs should support community organization and leadership leading to self-reliance and sustainability.

## **Recommendation for Micro-Level Resource Management and Sustainable Development in Linaca**

### **Paying attention to the *solar***

The *solar*, considered the realm of the woman, has been neglected in development projects. Programs and projects have emphasized the *parcela* and the crops or trees grown there. In the *solar* women raise small animals for consumption or sale, grow fruit trees and vegetable gardens, and cultivate medicinal plants and hardwood trees for construction and fuelwood. Optimizing use of the *solar* for growing or maintaining essential natural resources can help secure a woman’s access and control over these resources.

### **Providing a variety of tree species**

Programs for provision of fruit trees have been successful. Fruit is very important for household consumption, improved diet and opportunity for sales. Yet, limiting programs to fruit trees only, without offering other trees for fuelwood, hardwood or medicinal purposes ignores the complex responsibilities of rural Honduran women. For women and children living in female-headed households, planting fuelwood trees in their *solares* is extremely important. They have little or no access to the agricultural plots which are most often targeted for planting of such trees.

### **Improving the quality of household gardens**

Household gardens provide important food supplements for many households. Programs which build upon and strengthen women’s work in providing vegetables and fruits for their families would be valuable. For example, improved seed collection and storage help to ensure that women will have access to seeds for their vegetable gardens. Sale of these garden products can also increase income for women.

### **Increasing credit opportunities for women**

Overwhelmingly families depend on the land, and land is the basis for collateral. Ordinarily men inherit, purchase or rent land, but women usually reside year round in the community and must make decisions about the land when the men are working outside of the community. The agrarian reform in Honduras did not consider land tenure rights for women. Such oversight has resulted in limited access to credit for women. On the other hand, credit is more readily available to the male owner who may not be the person responsible for on-farm activities.

### **Transforming women's involvement in improved water supply: Decision-making, maintenance and supervision**

Access to water has improved during many months of the year as a result of the installation of new water technologies. New community water councils which manage installed water systems, however, are run by men. Both women and men should be involved in initial decisions about the appropriate types of water projects for their communities. In this way, decisions in regard to water will better reflect gender specific needs and responsibilities and increase women's control over this resource.

Maintenance of traditional water sources is generally the task of groups of women. Yet, if any training is provided in the maintenance and repair of the mechanical or technical components of the systems, men receive it. Exclusion of women from such training disadvantages them and their families since they are largely responsible for providing household water and water for small animals.

### **Training opportunities for women in agriculture and home-based industries**

Women who are landless or in households with very small *parcelas* seek ways to augment the family's income. They may sell fruit from trees planted in the *solar*, process foods for sale, or seek alternatives for earning money. Rarely do they have an opportunity for training either for improving home garden or farm output or for activities which would increase their sources of income. Nongovernmental or governmental projects which could offer such opportunities to women would begin to address some of the hardships faced by impoverished upland households.

The men and women of Linaca need secure livelihoods. They need ways to assure the productivity of their land, access to common forests and waters, and essential fairness as they engage in the broad regional economy. Governmental and nongovernmental organizations working with women and men in the rural communities can direct their efforts toward improving the terms by which landless and small producers are incorporated into the national economy. These residents can then work together to build a more viable rural economy based on self-determination and participation.



# Endnotes

<sup>1</sup> Southern Honduras includes the departments of de Valle Choluteca and the southern most portion of El Paraiso.

<sup>2</sup> None of LUPE's staff worked as a part of the research team, but many were essential key informants and liaisons, assisting at every stage of the study. In turn, the research team made available to LUPE the data gathered throughout the research process.

<sup>3</sup> Questions related to landholdings were often uncomfortable for respondents, and since the research team was not able to verify all responses, some cases of both over- and underestimations may exist. Size of landholdings is an important indicator of socioeconomic status in the community, and larger landholders were much less forthcoming with such information. One woman who owns several large pieces of land in one of the communities refused to answer because she didn't want to provide "another opportunity for conflict with poor neighbors." There are also cases of larger landowners who do not live in the community, so these cases were not incorporated into the field data.

<sup>4</sup> Important exceptions, however, are men who abandon wives and children to start a new and "better" life, and single young men and women who leave home independently to seek schooling or employment, especially in the cities, and do not contribute financially to their parents' household.

<sup>5</sup> Machismo is the fundamental concept defining gender in Honduras. "It is a form of sexism displayed by men and assimilated by women in which the man is viewed as ... the most privileged of the family unit" (CIDA 1991). According to several anthropological studies, machismo has three distinct roots: the racial mixing of Indians and Spaniards, the influence of the Catholic Church and the formation of the Liberal Republic. The colonial master, church doctrine and the legal and institutional framework of the country place women in a subordinate role both sexually and legally (Corvalan 1990; Oyuela 1989; Callejas *et al.* 1990).

<sup>6</sup> These numbers are considered conservative because they do not take into account absence due to labor migration. According to the findings of the Dutch Service for Technical and Social Cooperation's (SNV) study of marginalized rural and urban women in Honduras, no official definition of the concepts "female head-of-household" or "single mother" exists in Honduran research and policy formation.

<sup>7</sup> These changes occurred after COHAAT withdrew from Linaca, so an assessment of COHASA'S positive initiatives in Southern Honduras was not conducted.

<sup>8</sup> As a result of recommendations from the mid-term evaluation completed in May, 1993, the LUPE project has expanded training of female extensionists to include natural resource management and agronomy, previously handled by male extensionists working with men's groups. The evaluation acknowledged the serious efforts the project has made to incorporate gender issues and the impressive number of women receiving technical assistance from the WID extensionists in each of its 44 rural agencies. Nonetheless, it strongly recommended that LUPE move away from its strictly gender-segregated approach which limited women's involvement to "women's activities." The evaluation recommended that the project "strengthen its extension component by engaging extensionists, women or men, who can deal with both household and field activities on a less segregated basis" (Chemonics International 1993).

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# Glossary

- Ayote* - a type of squash
- Camote* - a type of squash
- Campesino(a)* - peasant
- Comal* - clay cookware used for cooking tortillas
- Cuajada* - soft cheese
- Curandero(a)* - traditional healer; local health care provider
- Elote Harvest* - immature corn harvest, occurring one month before harvest
- Garrobo* - lizard
- Granero* - grain storage; houses motorized grain grinder
- Lactario* - feeding centers for children, ages 0-5
- Lempira* - equals US \$.18; \$ 1 = 5.4 *lempiras*
- Manzana* - .7 hectare or 1.73 acres
- Parcela* - agricultural plot
- Patronato* - community council of men; aka Council of Community Development
- Pulperia* - community general store, supplying basic foodstuffs, condiments, household supplies and medications
- Quesadilla* - baked goods made from ground corn meal and cheese
- Rosquilla, Rosquettes* - sweet baked goods made from ground corn meal
- Solar* - yard or patio; land surrounding the house
- Sorgo* - animal feed variation of sorghum
- Trujo* - platform for drying and storing stalks of grain
- Yuca* - cassava
- Zonas expulsoras* - areas from which migrants originate

# Appendices

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## Appendix A:

### Research Methods

The research design for the case study in Choluteca closely followed the field data gathering techniques of rapid rural appraisal (McCracken *et al.* 1988; Conway 1988; and Chambers 1983 and 1985) and participatory rural appraisal (National Environment Secretariat *et al.* 1990). The research team modified the research instruments to gather gender-disaggregated data and to more closely reflect and respect the cultural climate of rural Southern Honduras, providing both a broad rural appraisal and a gender analysis (Thomas-Slayter *et al.* 1993) of the four upland communities. Different components of the research involved various units of analysis, including individuals within households, the household as a unit, community groups made up of individuals from many households and regional institutions and their representatives which directly or indirectly influence community life.

The research process involved three distinct phases: 1) direct communication with community members both individually and in groups; 2) communication with governmental and nongovernmental organizations working in the region, and the corporations which provide employment opportunities for migrant laborers from these communities; and 3) presentation by the research team of the preliminary findings to the community members and to LUPE staff.

During two community stays, research team members gathered spatial, time-related and social data with the assistance of many local residents. The team supplemented the maps available from the Rural Health Center in Agua Caliente with on-site surveying to develop current sketch maps of each community, further detailed with information gathered at community and household levels. **Gender mapping** techniques, depicting the landscape in terms of men's and women's labor and their access and control over natural resources (Rocheleau 1987), were incorporated into several sketches to visually represent the gendered space within the community.

**Community time-lines** provided the principal source of information about the unique development of each community since its founding. Two separate **focus groups** in each community, one with senior men and the other with senior women, discussed community histories emphasizing the changes in the natural resource base and key community development initiatives. The separate groups related gendered perspectives on conditions and changes in the community.

To supplement and broaden these accounts, household interview questions distinguished between past and present behavior and circumstances. The research team developed a guide for **in-depth household interviews** as a part of its orientation and training process and questions focused on issues related to local systems of production and reproduction. Additional social and historical data arose in **key informant interviews**, discussions and extensive **participant observation**. The main goals of the focus group discussions,

which were organized separately for women and men, were the construction of **gender-disaggregated seasonal activities calendar** (Feldstein and Poats 1989), analysis of each community's institutional structure, and a deeper understanding of the functions and procedures of several local organizations. The **confirmation survey** (see Appendix B) served as the quantitative piece of the research schedule. Survey questions validated previously observed phenomenon, clarified inconsistent findings and provided solid demographic data for effective analysis.

At the end of the field research process, the group of researchers prepared a **portfolio of information**, including maps and diagrams, to present in second community-wide meetings. The team converted the preliminary findings about the communities' natural resource history as well as the new conservation and prevention techniques utilized by men and women at the household and community levels into **educational materials** for the local schools and for agencies working in the region. Each community and LUPE received a packet of materials including a sketch map, community history (time-line), natural resource profile, a list of trees and medicinal plants and their local uses, and a list of active community organizations. In addition, each community received the following educational posters: "Community Activities Calendar" (gender disaggregated), "Typical Day of a Woman," "Typical Day of a Man in the Month of May," "Natural Resources and their Changes," and "Community Conservation and Prevention Techniques." The final community meetings provided a forum for the research team and community members to clarify any remaining questions and express any opinions.

## Appendix B:

### Confirmation Survey (ECOGEN - HONDURAS) May 25, 1992

Community:

Date:

Interviewer:

**Demographics:**

1. a. No. of the house #  
 b. Sex m \_\_\_ f \_\_\_  
 c. Age  
 d. Occupation
- e. Marital Status  
 1) \_\_\_ married or living with partner  
 2) \_\_\_ single  
 3) \_\_\_ abandoned  
 4) \_\_\_ widow(er)
2. a. Where were you born?  
 1) \_\_\_ in the community  
 2) \_\_\_ community of the aldea  
 3) \_\_\_ other

**If the answer is 2 or 3:**

- b. When did you come to the community?
- c. Why did you come?
  - 1) \_\_\_ to marry
  - 2) \_\_\_ parents moved
  - 3) \_\_\_ relatives live here
  - 4) \_\_\_ other

3. a. No. of people currently living in the household # \_\_\_\_\_  
 b. Who are they? (circle)  
 Children spouse grandchildren cousins  
 brothers father grandfather mother in-law daughter in-law  
 sisters mother grandmother father in-law son in-law

**Location of Relatives (4-6)**

4. a. Children # \_\_\_ m \_\_\_ f \_\_\_  
 b. Location of (#) of children  
 1) \_\_\_ in the community  
 2) \_\_\_ nearby community  
 3) \_\_\_ Choluteca  
 4) \_\_\_ Tegucigalpa  
 5) other
5. Of the woman  
 a. Siblings # \_\_\_ m \_\_\_ f \_\_\_  
 b. Location of (#) of siblings  
 1) \_\_\_ in the community  
 2) \_\_\_ community in the aldea  
 3) \_\_\_ Choluteca  
 4) \_\_\_ Tegucigalpa  
 5) \_\_\_ other  
 c. location of mother and father ("m" or "f")  
 1) \_\_\_ in the community  
 2) \_\_\_ community of the aldea  
 3) \_\_\_ Choluteca  
 4) \_\_\_ Tegucigalpa  
 5) \_\_\_ deceased
6. Of the man:  
 a. Siblings # \_\_\_ m \_\_\_ f \_\_\_  
 b. Location of (#) of siblings  
 1) \_\_\_ in the community  
 2) \_\_\_ community of the aldea  
 3) \_\_\_ Choluteca  
 4) \_\_\_ Tegucigalpa  
 5) \_\_\_ other  
 c. location of the mother and father ("m" or "f")  
 1) \_\_\_ in the community  
 2) \_\_\_ community of the aldea  
 3) \_\_\_ Choluteca  
 4) \_\_\_ Tegucigalpa  
 5) \_\_\_ other



7. a. Ability to read and write yes\_\_ no\_\_ b. Years of Schooling (#)

8. Dwelling: (observations)

- Walls	<input type="checkbox"/> a) Estacón	- Roof	<input type="checkbox"/> a) Clay tile	- Floor	<input type="checkbox"/> a) Dirt
	<input type="checkbox"/> b) Wood		<input type="checkbox"/> b) Thatched		<input type="checkbox"/> b) Cement
	<input type="checkbox"/> c) Bajareque		<input type="checkbox"/> c) Tin		<input type="checkbox"/> c) Wood
	<input type="checkbox"/> d) Adobe		<input type="checkbox"/> d) other		<input type="checkbox"/> d) Clay tile
	<input type="checkbox"/> e) Brick				

### Management of Natural Resources

9. Land Tenure

Relation

- a. Is your house & yard: privately owned borrowed\_\_rented\_\_Who is the owner? \_\_\_\_\_ f\_\_ m\_\_
- b. Is your parcel privately owned borrowed\_\_rented\_\_ Who is the owner? \_\_\_\_\_ f\_\_ m\_\_
- c. How many manzanas of land do you have/are you currently utilizing? \_\_\_ mzs

If the land is privately owned:

Transfer of the land

	Woman	Man	# of mzs	Title
1. Have you inherited land?	y__ no__	y__ no__	_____	y__ no__
2. Have you bought land?	y__ no__	y__ no__	_____	y__ no__
3. Have you sold land?	y__ no__	y__ no__	_____	To whom? _____
4. Are you renting...?	y__ no__	y__ no__	_____	To whom? _____

In what form do you plan to distribute your land to your children?

- 1) \_\_\_ in equal parts to all children      3) \_\_\_ nothing for the female children
- 2) \_\_\_ more for the male children      4) \_\_\_ there is not sufficient land to distribute

If the land is not privately owned:

Will you inherit land in the future?      Woman yes\_\_ no\_\_      Man yes\_\_ no\_\_

g. If yes: In what form will you inherit the land?

- \_\_\_ 1. Woman
- \_\_\_ 2. Man

Possible Responses:

- a) from father-equal parts for all children
- b) from mother-equal parts for all children
- c) from father-between the male children
- d) from mother-between the male children
- e) other \_\_\_\_\_

10. a. Do you have hired hands (mozos) who work on your parcel of land? y\_\_ no\_\_(#\_\_)

b. Does anyone in your family work on other people's farms in the community?

	for money	other arrangement
Man	yes__ no__	yes__ no__
Woman	yes__ no__	yes__ no__
Children	yes__ no__	yes__ no__
other	yes__ no__	yes__ no__

11. What did you plant (are you going to plant) this year?

Possible Responses:

- |                      |                |                  |                |
|----------------------|----------------|------------------|----------------|
| ___ a. in the yard   | a) corn        | f) sorgo         | k) ayote       |
| ___ b. in the parcel | b) sorghum     | g) sesame        | l) camote      |
|                      | c) yuca        | h) red beans     | m) cucumber    |
|                      | d) watermelon  | i) tomatoes      | n) other _____ |
|                      | e) green beans | j) green peppers |                |

12. Who helps in your parcel of land during the seasons of

	male children	female children	spouse	siblings	other relatives	mozos	no one
a. planting	_____	_____	_____	_____	_____	_____	_____
b. harvest	_____	_____	_____	_____	_____	_____	_____

**13. Conservation:**

a. Which conservation techniques do you use in your parcel and in your yard?

	Parcel	Yard
1) rockwalls	yes__ no__	yes__ no__
2) minimum tillage	yes__ no__	yes__ no__
3) curvas a nivel (A-frame)	yes__ no__	yes__ no__
4) conservation of trees	yes__ no__	yes__ no__
5) planting trees	yes__ no__	yes__ no__
6) fallow land	yes__ no__	

**Reasons for "yes"**

- a) fuelwood
- b) increase harvest
- c) fodder
- d) soil retention
- e) for benefit of the children
- f) other

**Reasons for "no"**

- a) no time
- b) land is not privately owned
- c) no materials
- d) destroyed by animals
- e) other

b. If they have planted trees: What type of trees have you planted in the last 12 months?

	in the yard	in the parcel
1) fruits	_____	_____
2) hardwood	_____	_____
3) fuelwood	_____	_____
4) medicinal	_____	_____

c. Do you burn your parcel? yes \_\_\_\_ no \_\_\_\_ Why? \_\_\_\_\_

**14. Source of Water and Maintenance**

a. Where do you obtain your water?

In summer	In winter
___ 1) for consumption	_____
___ 2) for washing	_____
___ 3) for the animals	_____

**Possible Responses:**

- a) from community tubing
- b) from a public faucet
- c) from a private well
- d) from a public well
- e) from a river/stream
- f) within my property
- g) other

b. How far is your principal water source?

- \_\_ 1. in summer
- \_\_ 2. in winter

**Possible Responses:**

- a) less than 1/2 k
- b) between 1/2-1 km
- c) between 1-2 km
- d) more than 2 kms

c. What materials are necessary for the maintenance of the water source?

- \_\_ 1) cement
- \_\_ 2) pump provisions
- \_\_ 3) stones
- \_\_ 4) hand tools
- \_\_ 5) chlorine
- \_\_ 6) other

d. What maintains your water source? Who? \_\_\_\_\_; f\_\_ m\_\_

15. Do you have animals? yes\_\_ no\_\_; Which ones? (don't note here)

16. If yes, Who is responsible for the animals?

a. How many	b. Feed	c. Kill	d. Treat/Cure	e. Sell
1) pigs	f__ m__	f__ m__	f__ m__	f__ m__
2) chickens/roosters	f__ m__	f__ m__	f__ m__	f__ m__
3) ducks/turkeys	f__ m__	f__ m__	f__ m__	f__ m__
4) cows	f__ m__	f__ m__	f__ m__	f__ m__
5) horses/donkeys	f__ m__	f__ m__	f__ m__	f__ m__

17. Where do you obtain the food and medicines to control sickness in animals?

	Food			Medicines		
	not bought	bought local	bought outside	not bought	bought locally	bought outside
a. pigs	.....	.....	.....	.....	.....	.....
b. birds	.....	.....	.....	.....	.....	.....
c. cows	.....	.....	.....	.....	.....	.....
d. horses/ donkeys	.....	.....	.....	.....	.....	.....

### Health

18. Have you used any medicinal plants for your family this year?

Which ones?

For what?

.....  
 .....  
 .....

19. Have you purchased any of the following medicines in the community store this year?

- 1) against pain                       4) against diarrhea  
 2) against infection                 5) for upset stomach  
 3) against fever

20. a. When was the last time you went to someone in the community to control your health?

b. Why? .....

21. a. When was the last time you went to see a doctor or a nurse? .....

b. Why? .....

### Food/Nutrition

22. For the women:

- a. How many times a day do you make tortillas? .....
- b. How many pounds of corn or sorghum does your family consume each day? .....
- c. How many tortillas do you make each day? .....

23. a. Do your children receive food from the lactario? yes\_\_ no\_\_; doesn't have children 0-6 yrs \_\_\_\_

b. Do your children receive school lunch? yes\_\_ no\_\_; doesn't have children in school \_\_\_\_

24. What food did you buy last week?

- a) corn                       d) vegetables             g) shortening/oil  
 b) beans                     e) fruit                     h) rice  
 c) coffee                     f) sugar                     i) others .....

25. In which months do you have to buy the most food?

nov dec jan feb mar apr may jun jul aug sept oct

### Local Institutions, Leaders and Informal Networks

26. a. Mention 3 of the most active community representatives - (Don't write names, just positions).

b. When was the last time you spoke with them? Why?

	Position	When spoke	Why
Leader 1	..... f__ m ____	.....	.....
Leader 2	..... f__ m ____	.....	.....
Leader 3	..... f__ m ____	.....	.....

27. If you need help/support, who do you turn to
- if you are sick \_\_\_\_\_
  - to take care of the children \_\_\_\_\_
  - if you are short on food \_\_\_\_\_
  - if you need to borrow money \_\_\_\_\_
28. a. In the past, did you belong to a group? yes\_\_ no\_\_ b. Which one? \_\_\_\_\_
- c. What did you do with the group?
- |   |                                      |
|---|--------------------------------------|
| __ 1) horticulture                      | __ 5) help the church                |
| __ 2) home improvement                  | __ 6) construction for the community |
| __ 3) farm improvement                  | __ 7) food preparation               |
| __ 4) conservation of natural resources | __ 8) other _____                    |
- d. Do you still belong to a group? yes\_\_ no\_\_ If no, why not? \_\_\_\_\_
- e. If no, do you still use what you learned in the group? yes\_\_ no\_\_
- f. Do you belong to another group now? yes\_\_ no\_\_; which one? \_\_\_\_\_
29. In your opinion, what organization has been most important for the community? \_\_\_\_\_
- Possible Responses:
- |                       |                  |
|-----------------------|------------------|
| a) Patronato          | e) Mothers' Club |
| b) Church             | f) LUPE          |
| c) School Lunch Comm. | g) COHAAT        |
| d) Lactarios          | h) PRODESAI      |
|                       | i) other _____   |

**External Influences**

30. Who in your family works outside of the community?
- | Relationship | Where | How much time | Does s/he return home? | When? |
|--------------|-------|---------------|------------------------|-------|
| .....        |       |               | yes__ no__             | _____ |
| .....        |       |               | yes__ no__             | _____ |
| .....        |       |               | yes__ no__             | _____ |
31. Who helps with household expenses?
- the couple f\_\_ m\_\_
  - parents f\_\_ m\_\_
  - siblings f\_\_ m\_\_
  - children f\_\_ m\_\_
32. What materials and tools have you purchased this year?
- |                   | purchased | borrowed | received from an organization |
|-------------------|-----------|----------|-------------------------------|
| a. for the yard   | .....     | .....    | .....                         |
| b. for the parcel | .....     | .....    | .....                         |